SUBJECT and TITLE INDEX

POLYMER ENGINEERING AND SCIENCE
VOLUME 17
1977

A

1. ABS

Structural Foam Molding of Incompatible Thermoplastics, J. L. Throne, *September, p. 682*

Injection Molding in Disk-Shaped Cavities, J. F. Stevenson, A. Galskoy, K. K. Wang, I. Chen and D. H. Reber, *September, p. 706*

2. Acrylic Acid

Effects of Orientation and Chemical Structure on the Strength Properties of Some Polymers, M. Takano and L. E. Nielsen, *April, p. 229*

3. Acrylics

Acrylic Resin Reinforcement of Reconstituted Collagen Films, E. W. Chapman and F. Rodriguez, *May, p. 282*

Polymer-Impregnated Mortars. I. Effect of Polymer State on Mechanical Behavior, Y.-N. Liu, J. A. Manson, W. F. Chen, and J. W. Vanderhoff, *May, p. 325*

4. Additives

The Evaluation of Internal Cracking in Polyurethane Adhesives, F. Swanson, *February, p. 122*

Fatigue Crack Propagation in Poly(Methyl Methacrylate): Effect of Molecular Weight and Internal Plasticization, S. L. Kim, M. Skibo, J. A. Manson, and R. W. Hertzberg, *March, p. 194*

Reuse of Plastics from Solid Wastes, A. Ram, M. Narkis, and J. Kost, *April, p. 274*

Oligomeric Fluorinated Additives as Surface Modifiers for Solid Polymers, M. K. Bernett, *July, p. 450*

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly(Vinyl Chloride) and Chlorinated Polyethylene as Models for Polyethylene Recycle Qualities, A. Holmström and E. M. Sörvik, *September, p. 700*

Effects of Coupling Agents on the Mechanical and Rheological Properties of Mica-Reinforced Polypropylene, M. S. Boaira and C. E. Chaffey, *October, p. 715*

Rheology and Wire Coating of High Atomic Number Metal-Low Density Polyethylene Composites, D. M. Bigg, *October, p. 745*

Effect of Additives on the Melt Elastic Modulus of Rigid Poly(Vinyl Chloride), R. G. Gough and I-J. Chen, *October, p. 764*

Light Stabilization of Flame Retardant Impact Polystyrene, R. Bradley, J. Farber, and L. Testa, *November, p. 782*

Conductive Polymeric Compositions, D. M. Bigg, *December, p. 842*

5. Adhesion

The Effect of Corona and Ozone Treatment on the Adhesion of Ink to the Surface of Polyethylene, M. Stradal and D. A. I. Goring, *January, p. 38*

Studies of Methyl Methacrylate-Methyl α-Chloroacrylate Copolymers and Poly(Methyl α-Chloroacrylate) as Electron Sensitive Positive Resists, J. H. Lai, L. T. Shepherd, R. Ulmer, and C. Griep, *June, p. 402*

Interfacial Phenomena between Brittle and Polymeric Films, T. S. Chow, R. C. Penwell, and C. A. Liu, *July, p. 436*

Surface Modification of Polymers and Practical Adhesion, H. Schonhorn, H. L. Frisch, and G. L. Gaines, Jr., *July, p. 440*

Oligomeric Fluorinated Additives as Surface Modifiers for Solid Polymers, M. K. Bernett, *July, p. 450*

Adhesion at Polypropylene—Cellophane Interfaces, A. Bialski, R. St. J. Manley, and H. P. Schreiber, *July, p. 456*

The Role of the Interface in Adhesion Phenomena, K. L. Mittal, *July, p. 467*

Interface Degradation Processes and Durability, D. H. Kaelble, *July, p. 474*

Interfacial (Polymer-Substrate) Failure of Ultraviolet Radiation Curable Coatings, V. D. McGinniss and A. Kah, *July, p. 478*

Adhesion Effects and Performance of Mass Transfer Equipment Using Teflon Surfaces, A. B. Ponter, *July, p. 484*

6. Adhesives

The Evaluation of Internal Cracking in Polyurethane Adhesives, F. Swanson, *February, p. 122*

Peel Mechanics of Adhesive Joints, A. N. Gent and G. R. Hamed, *July, p. 462*

Adhesive Properties of Star-Shaped Block Copolymers, G. C. Meyer and J. M. Widmaier, *November, p. 803*

7. Adsorbents

Polymeric Adsorbents for Treatment of Waste Effluents, R. Kunin, *January, p. 58*

8. Adsorption

Polymeric Adsorbents for Treatment of Waste Effluents, R. Kunin, *January, p. 58*

9. Aging

The Role of Intercrystalline Links in the Environmental Stress Cracking of High Density Polyethylene, P. D. Frayer, P. P. Tong, and W. W. Dreher, *January, p. 27*

Chemorheological Changes in Crosslinked Epoxy Resins Subjected to Large Strains, D. Katz and A. Buchman, *February, p. 85*

Physical Aging in Plastics and Other Glassy Materials, L. C. E. Struik, *March, p. 165*

10. Alcohols

Craze and Creep Resistance of High Impact Polystyrene in Alcohols, D. McCammond and V. S. Hoa, *December, p. 869*

11. Algorithm

Line-Profile Resist Development Simulation Techniques, R. E. Jewett, P. I. Hagouel, A. R. Neureuther, and T. Van Duzer, *June, p. 381*

12. Alignment

Experimental Characterization of the Alignment of Short Fibers During Flow, K. N. Murty and G. F. Modlen, *December, p. 848*

13. Amino Acids

New Block Copolymers of α-Amino Acids, F. Uralil, T. Hayashi, J. M. Anderson, and A. Hiltner, *August, p. 515*

14. Antioxidants

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly(Vinyl Chloride) and Chlorinated Polyethylene as Models for Polyethylene Recycle Qualities, A. Holmström and E. M. Sörvik, *September, p. 700*

15. Applications

Nylon Matting: A Textile Structure Used for Soil and Civil Engineering Applications, D. Godehn, *May, p. 317*

Properties and Applications of a Pitch Carbon Microsphere Composite, H. L. Price and J. B. Nelson, *May, p. 341*

Olefin-SO_2 Copolymers as Biomaterials, D. N. Gray, *October, p. 719*

Rubber Heat Engines, Analyses and Theory, R. J. Farris, *October, p. 737*

B

16. Biomaterials

Interface Degradation Processes and Durability, D. H. Kaelble, *July, p. 474*

Olefin-SO_2 Copolymers as Biomaterials, D. N. Gray, *October, p. 719*

17. Birefringence

Distribution of Some Physical Properties in Injection-Molded Thermoplastic Parts, Z. Bakerdjian and M. R. Kamal, *February, p. 96*

The Effect of Orientation on the Mechanical Properties of Injection Molded Polystyrene, L. Hoare and D. Hull, *March, p. 204*

Effects of Orientation and Chemical Structure on the Strength Properties of Some Polymers, M. Takano and L. E. Nielsen, *April, p. 229*

Structural and Mechanical Properties of an S-B-S Copolymer, J. A. Odell and A. Keller, *August, p. 544*

Thermal Treatment of Cold-Formed Poly(vinyl chloride), September, p. 686

18. Bisphenol-A

Bisphenol-A-Polycarbonate-Bisphenol-A-Polysulfone Block Copolymers, J. E. McGrath, T. C. Ward, E. Shchori, and A. J. Wnuk, *August, p. 647*

19. Blends

Mechanical Properties of Mixtures of Two Compatible Polymers, A. F. Yee, *March, p. 213*

Reuse of Plastics from Solid Wastes, A. Ram, M. Narkis, and J. Kost, *April, p. 274*

Miscibility of Poly(Vinyl Chloride) with Ethylene and Ethyl Acrylate-Carbon Monoxide Terpolymers, L. M. Robeson and J. E. McGrath, *May, p. 300*

Structure and Properties of Microcomposites and Macrocomposites from Block Polymers, S. L. Aggarwal and R. A. Livigni, *August, p. 498*

Morphology and Properties of Crystalline Polyester-Siloxane Block Copolymers, J. J. O'Malley and W. J. Stauffer, *August, p. 510*

Micelle Formation by Butadiene-Styrene Block Polymers in *n*-Alkanes, C. J. Stacy and G. Kraus, *August, p. 627*

The Influence of Diblock Copolymers on the Structure and Properties of Polybutadiene-Polyisoprene Blends, A. R. Ramos and R. E. Cohen, *August, p. 639*

Structural Foam Molding of Incompatible Thermoplastics, J. L. Throne, *September, p. 682*

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly(Vinyl Chloride) and Chlorinated Polyethylene as Models for Polyethylene Recycle Qualities, A. Holmström and E. M. Sörvik, *September, p. 700*

20. Block Copolymers

Strength of Elastomers—A Perspective, T. L. Smith, *March, p. 129*

Structure and Properties of Microcomposites and Macrocomposites from Block Polymers, S. L. Aggarwal and R. A. Livigni, *August, p. 498*

Morphology and Organizational Characteristics of Poly(m-Phenylene Isophthalamide-b-Ethylene Oxide) Systems, J. F. Fellers, Y.-D. Lee, R. J. Zdrahala, and S. C. Horne, *August, p. 506*

Morphology and Properties of Crystalline Polyester-Siloxane Block Copolymers, J. J. O'Malley and W. J. Stauffer, *August, p. 510*

New Block Copolymers of α-Amino Acids, F. Uralil, T. Hayashi, J. M. Anderson, and A. Hiltner, *August, p. 515*

Structure of AB Block Copolymers with a Polypeptide Block: Effect of the Chain Conformation, A. Douy and B. Gallot, *August, p. 523*

Diffusion and Solution of Gases and Vapors in Styrene-Butadiene Block Copolymers, H. Odani, K. Taira, N. Nemoto, and M. Kurata, *August, p. 527*

Linear Dynamic Mechanical Properties of An SBS Block Copolymer, E. V. Gouinlock and R. S. Porter, *August, p. 535*

Structural and Mechanical Properties of an S-B-S Copolymer, J. A. Odell and A. Kellers, *August, p. 544*

Viscoelastic Properties of Homogeneous Block Copolymers, M. Shen, D. Soong and D. R. Hansen, *August, p. 560*

Effect of Center Block Structure on the Physical and Rheological Properties of ABA Block Copolymers. Part II. Rheological Properties, S. Futamura and E. A. Meinecke, *August, p. 562*

Unit Cell Deformation under Elongational Stress of Oriented SIS Three-Block Copolymers, A. Mathis, G. Hadziioannou, and A. Skoulios, *August, p. 570*

Thermodynamics of Plasticized Triblock Copolymers. Part II. Model Verification by Light Transmittance and Rheology, E. R. Pico and M. C. Williams, *August, p. 573*

Statistical Thermodynamics of Microdomain Structures in Block Copolymer Systems, E. Helfand and Z. Wasserman, *August, p. 582*

Domain-Boundary Structure of Styrene-Isoprene Block Copolymer Films Cast from Solutions. III. Preliminary Results on Spherical Microdomains, A. Todo, H. Uno, K. Miyoshi, T. Hashimoto, and H. Kawai, *August, p. 587*

Small Angle X-Ray Scattering from Block Polymers. II. The Bulk State, A. D. Le Grand, G. G. Vitale, and D. G. LeGrand, *August, p. 598*

Pulsed Nuclear Magnetic Resonance for Studying Phase Separation in Block and Segmented Copolymers, R. A. Assink and G. L. Wilkes, *August, p. 606*

ESR Studies of Polymer Transitions. IV. Spin-Probe Studies of Styrene Block Copolymers, P. L. Kumler, S. E. Keinath, and R. F. Boyer, *August, p. 613*

Monte Carlo Studies of Isolated AB Block Copolymer Molecules, J. Bendler and K. Solc, *August, p. 622*

Micelle Formation by Butadiene-Styrene Block Polymers in *n*-Alkanes, C. J. Stacy and G. Kraus, *August, p. 627*

Emulsifying Properties of Block Copolymers. Oil-Water Emulsions and Microemulsions, G. Riess, J. Nervo, and D. Rogez, *August, p. 634*

The Influence of Diblock Copolymers on the Structure and Properties of Polybutadiene-Polyisoprene Blends, A. R. Ramos and R. E. Cohen, *August, p. 639*

Bisphenol-A-Polycarbonate-Bisphenol-A-Polysulfone Block Copolymers, J. E. McGrath, T. C. Ward, E. Shchori, and A. J. Wnuk, *August, p. 647*

Chlorosulfonated Block Copolymers, C. E. Rogers and M. L. Covitch, *August, p. 652*

Adhesive Properties of Star-Shaped Block Copolymers, G. C. Meyer and J. M. Widmaier, *November, p. 803*

21. Bonding

The Effect of Corona and Ozone Treatment on the Adhesion of Ink to the Surface of Polyethylene, M. Stradal and D. A. I. Goring, *January, p. 38*

22. Branching

On the Effect of Mechanical Energy on the Degradation of Polyethylene in the Solid State and in the Melt, A. Holmström, A. Andersson, and E. M. Sörvik, *October, p. 728*

Visoelastic Parameters of Characterized Branched Polyethylenes, A. Ram, *November, p. 793*

Adhesive Properties of Star-Shaped Block Copolymers, G. C. Meyer and J. M. Widmaier, *November, p. 803*

C

23. Carbon Black

Conductive Polymeric Compositions, D. M. Bigg, *December, p. 842*

24. Castor Oil

Castor Oil Based Interpenetrating Polymer Networks IV. Mechanical Behavior, G. M. Yenwo, L. H. Sperling, J. Pulido and J. A. Manson, *April, p. 251*

Castor Oil Based Interpenetrating Polymer Networks. II. Synthesis and Properties of Emulsion Polymerized Products, N. Devia-Manjarres, G. Yenwo, J. Pulido, J. A. Manson, A. Coupe, and L. H. Sperling, *May, p. 294*

25. Cellophane

Adhesion at Polypropylene—Cellophane Interfaces, A. Bialski, R. St. J. Manley, and H. P. Schreiber, *July, p. 456*

26. Cellulose Acetate

Deformation, Yield and Fracture of Polymers at High Pressure, J. A. Sauer, *March, p. 150*

27. Cellulose Acetate Butyrate

Stress Cracking of Plastics by Gasoline and Gasoline Components, M. G. Wyzgoski and C. H. M. Jacques, *December, p. 854*

28. Characterization

Molecular Order and Orientation in Aromatic Polyamide Fibers by Internal Reflection Spectroscopy and Wide Angle X-ray Diffraction, F. Druschke, H. W. Siesler, G. Spilgies, and H. Tengler, *February, p. 93*

Liquid Injection Molding. II. Mechanical Design and Characterization of a RIM Machine, S. C. Malguarnera and N. P. Suh, *February, p. 116*

Melt Characterization of Ultra High Molecular Weight Polyethylene Using Squeeze Flow, M. T. Shaw, *April, p. 266*

The Examination of Poly(5-Hexene-2-One Sulfone) as a Positive-Working Photoresist, R. J. Himics and D. L. Ross, *June, p. 350*

Studies of Methyl Methacrylate-Methyl α-Chloroacrylate Copolymers and Poly(Methyl α-Chloroacrylate) as Electron Sensitive Positive Resists, J. H. Lai, L. T. Shepherd, R. Ulmer, and C. Griep, *June, p. 402*

The Synthesis, Characterization, Evaluation, and Processing of Selected Cyclo-Olefin Sulfone Copolymers as Electron Beam Resists, R. J. Himics, M. Kaplan, N. V. Desai, and E. S. Poliniak, *June, p. 406*

Sensitive Chlorine-Containing Resists for X-Ray Lithography, G. N. Taylor, G. A. Coquin, and S. Somekh, *June, p. 420*

Surface Modification of Polymers and Practical Adhesion, H. Schonhorn, H. L. Frisch, and G. L. Gaines, Jr., *July, p. 440*

Morphology and Organizational Characteristics of Poly(m-Phenylene Isophthalamide-b-Ethylene Oxide) Systems, J. F. Fellers, Y.-D. Lee, R. J. Zdrahala, and S. C. Horne, *August, p. 506*

Structure of AB Block Copolymers with a Polypeptide Block: Effect of the Chain Conformation, A. Douy and B. Gallot, *August, p. 523*

Diffusion and Solution of Gases and Vapors in Styrene-Butadiene Block Copolymers, H. Odani, K. Taira, N. Nemoto and M. Kurata, *August, p. 527*

Domain-Boundary Structure of Styrene-Isoprene Block Copolymer Films Cast from Solutions. III. Preliminary Results of Spherical Microdomains, A. Todo, H. Uno, K. Miyoshi, T. Hashimoto, and H. Kawai, *August, p. 587*

ESR Studies of Polymer Transitions. IV. Spin-Probe Studies of Styrene Block Copolymers, P. L. Kumler, S. E. Keinath, and R. F. Boyer, *August, p. 613*

Micelle Formation by Butadiene-Styrene Block Polymers in *n*-Alkanes, C. J. Stacy and G. Kraus, *August, p. 627*

The Influence of Diblock Copolymers on the Structure and Properties of Polybutadiene-Polyisoprene Blends, A. R. Ramos and R. E. Cohen, *August, p. 639*

Bisphenol-A-Polycarbonate-Bisphenol-A-Polysulfone Block Copolymers, J. E. McGrath, T. C. Ward, E. Shchori, and A. J. Wnuk, *August, p. 647*

On the Effect of Mechanical Energy on the Degradation of Polyethylene in the Solid State and in the Melt, A. Holmström, A. Andersson, and E. M. Sörvik, *October, p. 728*

Experimental Characterization of the Alignment of Short Fibers During Flow, K. N. Murty and G. F. Modlen, *December, p. 845*

29. Chemorheology

Chemorheological Changes in Crosslinked Epoxy Resins Subjected to Large Strains, D. Katz and A. Buchman, *February, p.85*

30. Chlorine-Containing Resists

Sensitive Chlorine-Containing Resists for X-Ray Lithography, G. N. Taylor, G. A. Coquin, and S. Somekh, *June, p. 420*

31. Chloroacrylate Polymers

Sensitive Chlorine-Containing Resists for X-Ray Lithography, G. N. Taylor, G. A. Coquin, and S. Somekh, *June, p. 420*

Morphology and Properties of Crystalline Polyester-Siloxane Block Copolymers, J. J. O'Malley and W. J. Stauffer, *August, p. 510*

32. Chlorosulfonation

Chlorosulfonated Block Copolymers, C. E. Rogers and M. J. Covitch, *August, p. 652*

33. Coating

Polyimides in Lithography, R. K. Agnihotri, *June, p. 366*

Interfacial (Polymer-Substrate) Failure of Ultraviolet Radiation Curable Coatings, V. D. McGinniss and A. Kah, *July, p. 478*

34. Collagen

Acrylic Resin Reinforcement of Reconstituted Collagen Films, E. W. Chapman and F. Rodriguez, *May, p. 282*

Crosslinking Systems in the Graft Polymerization of Chromium-Tanned Collagen, E. H. Harris and S. H. Feairheller, *May, p. 287*

35. Compaction

Powder Processing of Ultra-High Molecular Weight Polyethylene I. Powder Characterization and Compaction, G. W. Halldin and I. L. Kamel, *January, p. 21*

36. Compatibility

Mechanical Properties of Mixtures of Two Compatible Polymers, A. F. Yee, *March, p. 213*

Structural Foam Molding of Incompatible Thermoplastics, J. L. Throne, *September, p. 682*

37. Composites

Oriented Short Glass Fiber Composites. III. Structure and Mechanical Properties of Molded Sheets, L. Kacir, M. Narkis, and O. Ishai, *April, p. 234*

Flexural Fatigue of Unidirectional Fiberglass-Reinforced Polyester, D. G. Fesko, *April, p. 242*

Low Cost Polyolefin Composites Containing Pulp Mill Wood Residue, G. R. Lightsey, P. H. Short, and V. K. K. Sinha, *May, p. 305*

Degradation Action of Water on S-Glass (Abstract only). A. C. T. Hsu, W. A. Jemian, and R. C. Wilcox, *May, p. 340*

Properties and Applications of a Pitch Carbon Microsphere Composite, H. L. Price and J. B. Nelson, *May, p. 341*

Interface Degradation Processes and Durability, D. H. Kaelble, *July, p. 474*

Structure and Properties of Microcomposites and Macrocomposites from Block Polymers, S. L. Aggarwal and R. A. Livigni, *August, p. 498*

Glass Bead-Filled Polypropylene. Part I. Rheological and Mechanical Properties, D. L. Faulkner and L. R. Schmidt, *September, p. 657*

Effects of Coupling Agents on the Mechanical and Rheological Properties of Mica-Reinforced Polypropylene, M. S. Boaira and C. E. Chaffey, *October, p. 715*

Rheology and Wire Coating of High Atomic Number Metal-Low Density Polyethylene Composites, D. M. Bigg, *October, p. 745*

Swelling and Hygroelasticity of Polymeric Composites, G. Marom, *November, p. 799*

Conductive Polymeric Compositions, D. M. Bigg, *December, p. 842*

Influence of Composite Film Structure on Reflectance of Vacuum Metallized Plastics, D. W. Hoffman and R. A. Dickie, *December, p. 865*

38. Compounding

Techniques for Compounding Glass Fiber-Reinforced Thermoplastics, K. Stade, *January, p. 50*

39. Compressive Properties

Properties and Applications of a Pitch Carbon Microsphere Composite, H. L. Price and J. B. Nelson, *May, p. 341*

40. Concentration

Correlations for Zero-Shear and Shear-Rate Dependent Viscosity of Polymeric Solutions, B. Chitrangad, H. R. Osmers, and S. Middleman, *November, p. 806*

Effect of Concentration on Apparent Viscosity of a Globular Protein Solution, P. Pradipasena and C. Rha, *December, p. 861*

41. Condensation

Adhesion Effects and Performances of Mass Transfer Equipment Using Teflon Surfaces, A. B. Ponter, *July, p. 484*

42. Conservation

Polyketones and Polysulfones for Conservation of Ethylene Polymers, M. Steinberg, *May, p. 335*

43. Cooling

Adhesion at Polypropylene—Cellophane Interfaces, A. Bialski, R. St. J. Manley, and H. P. Schreiber, *July, p. 456*

44. Copolymers

Effects of Orientation and Chemical Structure on the Strength Properties of Some Polymers, M. Takano and L. E. Nielsen, *April, p. 229*

Graft Copolymers of Polysaccharides with Thermoplastic Polymers. A New Type of Filled Plastic, E. B. Bagley, G. F. Fanta, R. C. Burr, W. M. Doane, and C. R. Russell, *May, p. 311*

Studies of Methyl Methacrylate-Methyl α-Chloroacrylate Copolymers and Poly(Methyl α-Chloroacrylate) as Electron Sensitive Positive Resists, J. H. Lai, L. T.

Shepherd, R. Ulmer, and C. Griep, *June, p. 402*

The Synthesis, Characterization, Evaluation, and Processing of Selected Cyclo-Olefin Sulfone Copolymers as Electron Beam Resists, R. J. Himics, M. Kaplan, N. V. Desai, and E. S. Poliniak, *June, p. 406*

Correlations for Zero-Shear and Shear-Rate Dependent Viscosity of Polymeric Solutions, B. Chitrangad, H. R. Osmers, and S. Middleman, *November, p. 806*

45. Corona Discharge

The Effect of Corona and Ozone Treatment on the Adhesion of Ink to the Surface of Polyethylene, M. Stradal and D. A. I. Goring, *January, p. 38*

46. Coupling Agents

Azidosilane Polymer—Filler Coupling Agent, G. A. McFarren, T. F. Sanderson, and F. G. Schappell, *January, p. 46*

Effects of Coupling Agents on the Mechanical and Rheological Properties of Mica-Reinforced Polypropylene, M. S. Boaira and C. E. Chaffey, *October, p. 715*

47. Cracking

The Role of Intercrystalline Links in the Environmental Stress Cracking of High Density Polyethylene, P. D. Frayer, P. P. Tong, and W. W. Dreher, *January, p. 27*

The Deep Drawing of Thermoplastics, M. J. Miles and N. J. Mills, *February, p. 101*

The Evaluation of Internal Cracking in Polyurethane Adhesives, F. Swanson, *February, p. 122*

Fatigue Crack Propagation in Poly(Methyl Methacrylate): Effect of Molecular Weight and Internal Plasticization, S. L. Kim, M. Skibo, J. A. Manson, and R. W. Hertzberg, *March, p. 194*

Structural and Mechanical Properties of an S-B-S Copolymer, J. A. Odell and A. Keller, *August, p. 544*

Stress Cracking of Plastics by Gasoline and Gasoline Components, M. G. Wyzgoski and C. H. M. Jacques, *December, p. 854*

Craze and Creep Resistance on High Impact Polystyrene in Alcohols, D. McCammond and V. S. Hoa, *December, p. 869*

48. Creep

Physical Aging in Plastics and Other Glassy Materials, L. C. E. Struik, *March, p. 165*

Predicting the Service Life of Polysulfone in Steam or Hot Water, R. K. Dearing, *December, p. 832*

Effect of Cross-Linking on Hydrostatic Creep of Epoxy, W. N. Findley and R. M. Reed, *December, p. 837*

Craze and Creep Resistance of High Impact Polystyrene in Alcohols, D. McCammond and V. S. Hoa, *December, p. 869*

49. Crosslinking

Crosslinking Systems in the Graft Polymerization of Chromium-Tanned Collagen, E. H. Harris and S. H. Feairheller, *May, p. 287*

Polymer-Impregnated Mortars. I. Effect of Polymer State on Mechanical Behavior, Y.-N. Liu, J. A. Manson, W. F. Chen, and J. W. Vanderhoff, *May, p. 325*

Water-Soluble, Reciprocity-Law-Failing Photoresist, M. Akagi, S. Nonogaki, T. Kohashi, Y. Oba, M. Oikawa, and Y. Tomita, *June, p. 353*

Theoretical Considerations on the Sensitivities of Electron Beam Resists, M. Tsuda, S. Oikawa, and A. Suzuki, *June, p. 390*

Effects of Post-Curing of Unsaturated Polyester Resins in Various Media, S-A. Chen and P-K. Tsai, *November, p. 775*

Effect of Cross-Linking of Hydrostatic Creep of Epoxy, W. N. Findley and R. M. Reed, *December, p. 837*

50. Crystallinity

Powder Processing of Ultra-High Molecular Weight Polyethylene I. Powder Characterization and Compaction, G. W. Halldin and I. L. Kamel, *January, p. 21*

The Role of Intercrystalline Links in the Environmental Stress Cracking of High Density Polyethylene, P. D. Frayer, P. P. Tong, and W. W. Dreher, *January, p. 27*

Plastic Deformation of Crystalline Polymers, A. Peterlin, *March, p. 183*

Miscibility of Poly(Vinyl Chloride) with Ethylene and Ethyl Acrylate-Carbon Monoxide Terpolymers, L. M. Robeson and J. E. McGrath, *May, p. 300*

Adhesion at Polypropylene—Cellophane Interfaces, A. Bialski, R. St. J. Manley, and H. P. Schreiber, *July, p. 456*

Pulsed Nuclear Magnetic Resonance for Studying Phase Separation in Block and Segmented Copolymers, R. A. Assink and G. L. Wilkes, *August, p. 606*

51. Curing

Interfacial (Polymer-Substrate) Failure of Ultraviolet Radiation Curable Coatings, V. D. McGinniss and A. Kah, *July, p. 478*

Effects of Post-Curing of Unsaturated Polyester Resins in Various Media, S-A. Chen and P-K. Tsai, *November, p. 775*

D

52. Decomposition

A Water-Soluble, Reciprocity-Law-Failing Photoresist, M. Akagi, S. Nonogaki, T. Kohashi, Y. Oba, M. Oikawa, and Y. Tomita, *June, p. 353*

53. Deformation

Frictional Behavior of Solid Polymers on a Metal Surface at Processing Conditions, C. I. Chung, W. J. Hennessey, and M. H. Tusim, *January, p. 9*

Strength of Elastomers—A Perspective, T. L. Smith, *March, p. 129*

Deformation, Yield and Fracture of Polymers at High Pressure, J. A. Sauer, *March, p. 150*

Physical Aging in Plastics and Other Glassy Materials, L. C. E. Struik, *March, p. 165*

Plastic Flow in Glassy Polymers, A. S. Argon and M. I. Bessonov, *March, p. 174*

Plastic Deformation of Crystalline Polymers, A. Peterlin, *March, p. 183*

The Effect of Orientation on the Mechanical Properties of Injection Molded Polystyrene, L. Hoare and D. Hull, *March, p. 204*

Three Dimensional Behavior of Negative Electron Resists, R. D. Heidenreich and G. W. Kammlott, *June, p. 377*

Structure and Properties of Microcomposites and Macrocomposites from Block Polymers, S. L. Aggarwal and R. A. Livigni, *August, p. 498*

Structural and Mechanical Properties of an S-B-S Copolymer, J. A. Odell and A. Keller, *August, p. 544*

Unit Cell Deformation under Elongational Stress of Oriented SIS Three-Block Copolymers, A. Mathis, G. Hadziioannou, and A. Skoulios, *August, p. 570*

Charpy Tests on Brittle Polymers, A. G. M. Tak, *October, p. 733*

Predicting the Service Life of Polysulfone in Steam or Hot Water, R. K. Dearing, *December, p. 832*

54. Degradation

Degradation Action of Water on S-Glass (Abstract only.), A. C. T. Hsu, W. A. Jemian, and R. C. Wilcox, *May, p. 340*

Theoretical Considerations on the Sensitivities of Electron Beam Resists, M. Tsuda, S. Oikawa, and A. Suzuki, *June, p. 390*

Studies of Methyl Methacrylate-Methyl α-Chloroacrylate Copolymers and Poly(Methyl α-Chloroacrylate) as Electron Sensitive Positive Resists, J. H. Lai, L. T. Shepherd, R. Ulmer, and C. Griep, *June, p. 402*

Thermally-Reacted Poly(methacrylamide) as a Positive Electron Beam Resist, S. Matsuda, S. Tsuchiya, M. Honma, K. Hasegawa, G. Nagamatsu, and T. Asano, *June, p. 410*

Interface Degradation Processes and Durability, D. H. Kaelble, *July, p. 474*

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly (Vinyl Chloride) and Chlorinated Polyethylene as Models for Polyethylene Recycle Qualities, A. Holmström and E. M. Sörvik, *September, p. 700*

Thermal Load in the Processing of Thermoplastics, J. F. Ingen Housz, *December, p. 828*

55. Density

Powder Processing of Ultra-High Molecular Weight Polyethylene I. Powder Characterization and Compaction, G. W. Halldin and I. L. Kamel, *January, p. 21*

Distribution of Some Physical Properties in Injection-Molded Thermoplastic Parts, Z. Bakerdjian and M. R. Kamal, *February, p. 96*

Interfacial (Polymer-Substrate) Failure of Ultraviolet Radiation Curable Coatings, V. D. McGinniss and A. Kah, *July, p. 478*

Olefin-SO_2 Copolymers as Biomaterials, D. N. Gray, *October, p. 719*

56. Design

Liquid Injection Molding. II. Mechanical Design and Characterization of a RIM Machine, S. C. Malguarnera and N. P. Suh, *February, p. 116*

Fracture Mechanics of Polymers, J. G. Williams, *March, p. 144*

Wall Slip and Its Implications in the Design of Single Screw Melt-Fed Extruders, R. A. Worth and J. Parnaby, *April, p. 257*

57. Diffusion

Permeation and Sorption in Inhomogeneous Polymer Membranes, H. L. Frisch, *February, p. 81*

Oligomeric Fluorinated Additives as Surface Modifiers for Solid Polymers, M. K. Bernett, *July, p. 450*

The Role of the Interface in Adhesion Phenomena, K. L. Mittal, *July, p. 467*

Diffusion and Solution of Gases and Vapors in Styrene-Butadiene Block Copolymers, H. Odani, K. Taira, N. Nemoto, and M. Kurata, *August, p. 527*

Swelling and Hygroelasticity of Polymeric Composites, G. Marom, *November, p. 799*

58. Dissolution

Differential Dissolution and Electron-Beam Lithographic Sensitivity of Poly(methyl methacrylate), J. N. Helbert, C. F. Cook, Jr., E. H. Poindexter, and B. E. Wagner, *June, p. 414*

59. Drainage

Nylon Matting: A Textile Structure Used for Soil and Civil Engineering Applications, D. Godehn, *May, p. 317*

Porous Fabric Membranes for Soil Stabilization and Drainage, R. R. Miano, *May, p. 320*

60. Drawing

The Deep Drawing of Thermoplastics, M. J. Miles and N. J. Mills, *February, p. 101*

Plastic Deformation of Crystalline Polymers, A. Peterlin, *March, p. 183*

Castor Oil Based Interpenetrating Polymer Networks IV. Mechanical Behavior, G. M. Yenwo, L. H. Sperling, J. Pulido, and J. A. Manson, *April, p. 251*

61. Durability

Interface Degradation Processes and Durability, D. H. Kaelble, *July, p. 474*

62. Dynamic Mechanical Measurements

A Forced Torsional Oscillator For Dynamic Mechanical Measurements, W. M. Davis and C. W. Macosko, *January, p. 32*

Linear Dynamic Mechanical Properties of An SBS Block Copolymer, E. V. Gouinlock and R. S. Porter, *August, p. 535*

Viscoelastic Properties of Homogeneous Block Copolymers, M. Shen, D. Soong, and D. R. Hansen, *August, p. 560*

The Influence of Diblock Copolymers on the Structure and Properties of Polybutadiene-Polyisoprene Blends, A. R. Ramos and R. E. Cohen, *August, p. 639*

Bisphenol-A-Polycarbonate-Bisphenol-A-Polysulfone Block Copolymers, J. E. McGrath, T. C. Ward, E. Shchori, and A. J. Wnuk, *August, p. 647*

Chlorosulfonated Block Copolymers, C. E. Rogers and M. J. Covitch, *August, p. 652*

E

63. Ecology

Polymeric Adsorbents for Treatment of Waste Effluents, R. Kunin, *January, p. 58*

Reuse of Plastics from Solid Wastes, A. Ram, M. Narkis, and J. Kost, *April, p. 274*

64. Economics

Polyketones and Polysulfones for Conservation of Ethylene Polymers, M. Steinberg, *May, p. 335*

Olefin-SO_2 Copolymers as Biomaterials, D. N. Gray, *October, p. 719*

65. Elasticity

Plastic Deformation of Crystalline Polymers, A. Peterlin, *March, p. 183*

Effect of Additives on the Melt Elastic Modulus of Rigid Poly(Vinyl Chloride), R. G. Gough and I-J. Chen, *October, p. 765*

66. Elastomers

Strength of Elastomers—A Perspective, T. L. Smith, *March, p. 129*

67. Electrical Conductivity

Conductive Polymeric Compositions, D. M. Bigg, *December, p. 842*

68. Electroless Deposition

The Role of the Interface in Adhesion Phenomena, K. L. Mittal, *July, p. 467*

Conductive Polymeric Compositions, D. M. Bigg, *December, p. 842*

69. Electron Beam Resists

Theoretical Considerations on the Sensitivities of Electron Beam Resists, M. Tsuda, S. Oikawa, and A. Suzuki, *June, p. 390*

The Synthesis, Characterization, Evaluation, and Processing of Selected Cyclo-Olefin Sulfone Copolymers as Electron Beam Resists, R. J. Himics, M. Kaplan, N. V. Desai, and E. S. Poliniak, *June, p. 406*

Thermally-Reacted Poly(methacrylamide) as a Positive Electron Beam Resist, S. Matsuda, S. Tsuchiya, M. Honma, K. Hasegawa, G. Nagamatsu, and T. Asano, *June, p. 410*

Differential Dissolution and Electron-Beam Lithographic Sensitivity of Poly(methyl methacrylate), J. N. Helbert, C. F. Cook, Jr., E. H. Poindexter, and B. E. Wagner, *June, p. 414*

70. Emulsifying Properties

Emulsifying Properties of Block Copolymers. Oil-Water Emulsions and Microemulsions, G. Riess, J. Nervo, and D. Rogez, *August, p. 634*

71. Emulsions

Emulsifying Properties of Block Copolymers. Oil-Water Emulsions and Microemulsions, G. Riess, J. Nervo, and D. Rogez, *August, p. 634*

72. Energy Conversion

On the Effect of Mechanical Energy on the Degradation of Polyethylene in the Solid State and in the Melt, A. Holmström, A. Andersson, and E. M. Sörvik, October, p. 728

Rubber Heat Engines, Analyses and Theory, R. J. Farris, *October, p. 737*

73. Engineering

Nylon Matting: A Textile Structure Used for Soil and Civil Engineering Applications, D. Godehn, *May, p. 317*

74. Engines

Rubber Heat Engines, Analyses and Theory, R. J. Farris, *October, p. 737*

75. Epoxies

Chemorheological Changes in Crosslinked Epoxy Resins Subjected to Large Strains, D. Katz and A. Buchman, *February, p. 85*

Oriented Short Glass Fiber Composites. III. Structure and Mechanical Properties of Molded Sheets, L. Kacir, M. Narkis, and O. Ishai, *April, p. 234*

The Effect of Polymer Host on Volume Phase Holographic Recording Properties, A. Bloom, R. A. Bartolini, and P. L. K. Hung, *June, p. 356*

Swelling and Hygroelasticity of Polymeric Composites, G. Marom, *November, p. 799*

Effect of Cross-Linking on Hydrostatic Creep of Epoxy, W. N. Findley and R. M. Reed, *December, p. 837*

76. Etching

Line-Profile Resist Development Simulation Techniques, R. E. Jewett, P. I. Hagouel, A. R. Neureuther and T. Van Duzer, *June, p. 381*

Studies of Methyl Methacrylate-Methyl α-Chloroacrylate Copolymers and Poly(Methyl α-Chloroacrylate) as Electron Sensitive Positive Resists, J. H. Lai, L. T. Shepherd, R. Ulmer, and C. Griep, *June, p. 402*

77. Extensibility

Strength of Elastomers—A Perspective, T. L. Smith, *March, p. 129*

78. Extruders

Wall Slip and Its Implications in the Design of Single Screw Melt-Fed Extruders, R. A. Worth and J. Parnaby, *April, p. 257*

Thermal Load in the Processing of Thermoplastics, J. F. Ingen Housz, *December, p. 828*

79. Extrusion

Low Cost Polyolefin Composites Containing Pulp Mill Wood Residue, G. R. Lightsey, P. H. Short, and V. K. K. Sinha, *May, p. 305*

Graft Copolymers of Polysaccharides with Thermoplastic Polymers. A New Type of Filled Plastic, E. B. Bagley, G. F. Fanta, R. C. Burr, W. M. Doane, and C. R. Russell, *May, p. 311*

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly(Vinyl Chloride) and Chlorinated Polyethylene as Models for Polyethylene Recycle Qualities, A. Holmström and E. M. Sörvik, *September, p. 700*

Some Comments on Post Extrusion Swelling Phenomena: Die Entrance or Die Passage, L. L. Chapoy and S. Pedersen, *October, p. 724*

Thermal Load in the Processing of Thermoplastics, J. F. Ingen Housz, *December, p. 828*

F

80. Fatigue

Fatigue Crack Propagation in Poly(Methyl Methacrylate): Effect of Molecular Weight and Internal Plasticization, S. L. Kim, M. Skibo, J. A. Manson, and R. W. Hertzberg, *March, p. 194*

Flexural Fatigue of Unidirectional Fiberglass-Reinforced Polyester, D. G. Fesko, *April, p. 242*

Influence of Molecular Weight on Fatigue Behavior of Polyethylene and Polystyrene, J. A. Sauer, E. Foden, and D. R. Morrow, *April, p. 246*

81. Fibers

The Rheology of Suspensions of Titanate Fibers in Polymer Solution, S. Onogi, Y. Mikami, and T. Matsumoto, *January, p. 1*

Techniques for Compounding Glass Fiber-Reinforced Thermoplastics, K. Stade, *January, p. 50*

Molecular Order and Orientation in Aromatic Polyamide Fibers by Internal Reflection Spectroscopy and Wide Angle X-ray Diffraction, F. Druschke, H. W. Siesler, G. Spilgies, and H. Tengler, *February, p. 93*

Conductive Polymeric Compositions, D. M. Bigg, *December, p. 842*

Experimental Characterization of the Alignment of Short Fibers During Flow, K. N. Murty and G. F. Modlen, *December, p. 848*

82. Fillers

Azidosilane Polymer—Filler Coupling Agent, G. A. McFarren, T. F. Sanderson, and F. G. Schappell, *January, p. 46*

Low Cost Polyolefin Composites Containing Pulp Mill Wood Residue, G. R. Lightsey, P. H. Short, and V. K. K. Sinha, *May, p. 305*

Graft Copolymers of Polysaccharides with Thermoplastic Polymers. A New Type of Filled Plastic, E. B. Bagley, G. F. Fanta, R. C. Burr, W. M. Doane, and C. R. Russell, *May, p. 311*

Glass Bead-Filled Polypropylene. Part I. Rheological and Mechanical Properties, D. L. Faulkner and L. R. Schmidt, *September, p. 657*

Glass Bead-Filled Polypropylene. Part II. Mold-Filling Studies during Injection Molding, L. R. Schmidt, *September, p. 666*

Rheology and Wire Coating of High Atomic Number Metal—Low Density Polyethylene Composites, D. M. Bigg, *October p. 745*

Conductive Polymeric Compositions, D. M. Bigg, *December, p. 842*

83. Film

Acrylic Resin Reinforcement of Reconstituted Collagen Films, E. W. Chapman and F. Rodriguez, *May, p. 282*

Miscibility of Poly(Vinyl Chloride) with Ethylene and Ethyl Acrylate-Carbon Monoxide Terpolymers, L. M. Robeson and J. E. McGrath, *May, p. 300*

The Examination of Poly(5-Hexene-2-One Sulfone) as a Positive-Working Photoresist, R. J. Himics and D. L. Ross, *June, p. 350*

Thermally-Reacted Poly(methacrylamide) as a Positive Electron Beam Resist, S. Matsuda, S. Tsuchiya, M. Honma, K. Hasegawa, G. Nagamatsu, and T. Asano, *June, p. 410*

Interfacial Phenomena between Brittle and Polymeric Films, T. S. Chow, R. C. Penwell, and C. A. Liu, *July, p. 436*

Oligomeric Fluorinated Additives as Surface Modifiers for Solid Polymers, M. K. Bernett, *July, p. 450*

Morphology and Organizational Characteristics of Poly(m-Phenylene Isophthalamide-b-Ethylene Oxide) Systems, J. F. Fellers, Y.-D. Lee, R. J. Zdrahala, and S. C. Horne, *August, p. 506*

Morphology and Properties of Crystalline Polyester-Siloxane Block Copolymers, J. J. O'Malley and W. J. Stauffer, *August, p. 510*

Diffusion and Solution of Gases and Vapors in Styrene-Butadiene Block Copolymers, H. Odani, K. Taira, N. Nemoto, and M. Kurata, *August, p. 527*

Thermodynamics of Plasticized Triblock Copolymers. Part II. Model Verification by Light Transmittance and Rheology, E. R. Pico and M. C. Williams, *August, p. 573*

Small Angle X-Ray Scattering from Block Polymers. II. The Bulk State, A. D. Le Grand, G. G. Vitale, and D. G. LeGrand, *August, p. 598*

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly(Vinyl Chloride) and Chlorinated Polyethylene As Models for Polyethylene Recycle Qualities, A. Holmström and E. M. Sörvik, *September, p. 700*

Influence of Composite Film Structure on Reflectance of Vacuum Metallized Plastics, D. W. Hoffman and R. A. Dickie, *December, p. 865*

84. Flame Retardants

Light Stabilization of Flame Retardant Impact Polystyrene, R. Bradley, J. Farber, and L. Testa, *November, p. 782*

85. Flexural Properties

Azidosilane Polymer—Filler Coupling Agent, G. A. McFarren, T. F. Sanderson, and F. G. Schappell, *January, p. 46*

Flexural Fatigue of Unidirectional Fiberglass-Reinforced Polyester, D. G. Fesko, *April, p. 242*

Structural Foam Molding of Incompatible Thermoplastics, J. L. Throne, *September, p. 682*

Effects of Coupling Agents on The Mechanical and Rheological Properties of Mica-Reinforced Polypropylene, M. S. Boaira and C. E. Chaffey, *October, p. 715*

86. Flow

The Rheology of Suspensions of Titanate Fibers in Polymer Solution, S. Onogi, Y. Mikami, and T. Matsumoto, *January, p. 1*

Liquid Injection Molding. II. Mechanical Design and Characterization of a RIM Machine, S. C. Malguarnera and N. P. Suh, *February, p. 116*

Plastic Flow in Glassy Polymers, A. S. Argon and M. I. Bessonov, *March, p. 174*

Wall Slip and Its Implications in the Design of Single Screw Melt-Fed Extruders, R. A. Worth and J. Parnaby, *April, p. 257*

Glass Bead-Filled Polypropylene. Part I. Rheological and Mechanical Properties, D. L. Faulkner and L. R. Schmidt, *September, p. 657*

Glass Bead-Filled Polypropylene. Part II. Mold-Filling Studies during Injection Molding, L. R. Schmidt, *September, p. 666*

Stratified Two-Phase Flow of Molten Polymers in Circular Dies, E. Uhland, *September, p. 671*

Injection Molding in Disk-Shaped Cavities, J. F. Stevenson, A. Galskoy, K. K. Wang, I. Chen and D. H. Reber, *September, p. 706*

Pressure-Specific Volume-Temperature Behavior of Thermoplastic Polymers Under Normal Processing Conditions, G. Menges and P. Thienel, *October, p. 758*

Correlation of Low Density Polyethylene Rheological Measurements with Optical and Processing Properties, M. Shida, R. N. Shroff, and L. V. Cancio, *November, p. 769*

A Study of the Flow Properties of Rubbers Using Rheometrics Mechanical Spectrometer, D. P. Mukherjee, *November, p. 788*

Flow and Heat Transfer in the Nozzle of an Injection Molding Machine, R. E. Nunn and R. T. Fenner, *November, p. 811*

Experimental Characterization of the Alignment of Short Fibers During Flow, K. N. Murty and G. F. Modlen, *December, p. 848*

87. Fluid Mechanics

Liquid Injection Molding. I. An Investigation of Impingement Mixing, S. C. Maguarnera and N. P. Suh, *February, p. 111*

88. Foam

Structural Foam Molding of Incompatible Thermoplastics, J. L. Throne, *September, p. 682*

89. Fracture

Strength of Elastomers—A Perspective, T. L. Smith, *March, p. 129*

Fracture Mechanics of Polymers, J. G. Williams, *March, p. 144*

Deformation, Yield and Fracture of Polymers at High Pressure, J. A. Sauer, *March, p. 150*

Fatigue Crack Propagation in Poly(Methyl Methacrylate): Effect of Molecular Weight and Internal Plasticization, S. L. Kim, M. Skibo, J. A. Manson, and R. W. Hertzberg, *March, p. 194*

The Effect of Orientation on the Mechanical Properties of Injection Molded Polystyrene, L. Hoare and D. Hull, *March, p. 204*

Charpy Tests on Brittle Polymers, A. G. M. Tak, *October, p. 733*

Effect of Additives on the Melt Elastic Modulus of Rigid Poly(Vinyl Chloride), R. G. Gough and I-J. Chen, *October, p. 764*

90. Fracture Mechanics

Fracture Mechanics of Polymers, J. G. Williams, *March, p. 144*

Interface Degradation Processes and Durability, D. H. Kaelble, *July, p. 474*

91. Frequency Dependence

A Forced Torsional Oscillator For Dynamic Mechanical Measurements,

W. M. Davis and C. W. Macosko, *January, p. 32*

92. Frictional Coefficient

Frictional Behavior of Solid Polymers on a Metal Surface at Processing Conditions, C. I. Chung, W. J. Hennessey, and M. H. Tusim, *January, p. 9*

G

93. Gases

Solubility of Supercritical Gases in Polymers—A Review, D. C. Bonner, *February, p. 65*

94. Gasoline

Stress Cracking of Plastics by Gasoline and Gasoline Components, M. G. Wyzgoski and C. H. M. Jacques, *December, p. 854*

95. Glass

Adhesive Properties of Star-Shaped Block Copolymers, G. C. Meyer and J. M. Widmaier, *November, p. 803*

96. Glass Beads

Glass Bead-Filled Polypropylene. Part I. Rheological and Mechanical Properties, D. L. Faulkner and L. R. Schmidt, *September, p. 657*

Glass Bead-Filled Polypropylene. Part II. Mold-Filling Studies during Injection Molding, L. R. Schmidt, *September, p. 666*

97. Glass Fibers

Techniques for Compounding Glass Fiber-Reinforced Thermoplastics, K. Stade, *January, p. 50*

Oriented Short Glass Fiber Composites. III. Structure and Mechanical Properties of Molded Sheets, L. Kacir, M. Narkis, and O. Ishai, *April, p. 234*

Flexural Fatigue of Unidirectional Fiberglass-Reinforced Polyester, D. G. Fesko, *April, p. 242*

Degradation Action of Water on S-Glass (Abstract only.) A. C. T. Hsu, W. A. Jemian, and R. C. Wilcox, *May, p. 340*

Swelling and Hygroelasticity of Polymeric Composites, G. Marom, *November, p. 799*

98. Glassy Polymers

Physical Aging in Plastics and Other Glassy Materials, L. C. E. Struik, *March, p. 165*

Plastic Flow in Glassy Polymers, A. S. Argon and M. I. Bessonov, *March, p. 174*

Structure and Properties of Microcomposites and Macrocomposites from Block Polymers, S. L. Aggarwal and R. A. Livigni, *August, p. 498*

99. Graft Polymerization

Crosslinking Systems in the Graft Polymerization of Chromium-Tanned Collagen, E. H. Harris and S. H. Feairheller, *May, p. 287*

H

100. Heat

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly(Vinyl Chloride) and Chlorinated Polyethylene as Models for Polyethylene Recycle Qualities, A. Holmström and E. M. Sörvik, *September, p. 700*

101. Heat Shrinkage

Distribution of Some Physical Properties in Injection-Molded Thermoplastic Parts, Z. Bakerdjian and M. R. Kamal, *February, p. 96*

102. Heat Transfer

Flow and Heat Transfer in the Nozzle of an Injection Molding Machine, R. E. Nunn and R. T. Fenner, *November, p. 811*

103. Holograms

The Effect of Polymer Host on Volume Phase Holographic Recording Properties, A. Bloom, R. A. Bartolini, and P. L. K. Hung, *June, p. 356*

104. Holographic Recording Properties

The Effect of Polymer Host on Volume Phase Holographic Recording Properties, A Bloom, R. A. Bartolini, and P. L. K. Hung, *June, p. 356*

105. Hygroelasticity

Swelling and Hygroelasticity of Polymeric Composites, G. Marom, *November, p. 799*

I

106. Impact Properties

Azidosilane Polymer—Filler Coupling Agent, G. A. McFarren, T. F. Sanderson, and F. G. Schappell, *January, p. 46*

Reuse of Plastics from Solid Wastes, A. Ram, M. Narkis, and J. Kost, *April, p. 274*

Castor Oil Based Interpenetrating Polymer Networks. II. Synthesis and Properties of Emulsion Polymerized Products, N. Devia-Manjarres, G. Yenwo, J. Pulido, J. A. Manson, A. Coupe, and L. H. Sperling *May, p. 294*

Low Cost Polyolefin Composites Containing Pulp Mill Wood Residue, G. R. Lightsey, P. H. Short, and V. K. K. Sinha, *May, p. 305*

Structure and Properties of Microcomposites and Macrocomposites from Block Polymers, S. L. Aggarwal and R. A. Livigni, *August, p. 498*

Charpy Tests on Brittle Polymers, A. G. M. Tak, *October, p. 733*

107. Impact Testing

Fracture Mechanics of Polymers, J. G. Williams, *March, p. 144*

Charpy Tests on Brittle Polymers, A. G. M. Tak, *October, p. 733*

108. Impingement Mixing

Liquid Injection Molding. I. An Investigation of Impingement Mixing, S. C. Malguarnera and N. P. Suh, *February, p. 111*

109. Impregnation

Polymer-Impregnated Mortars. I. Effect of Polymer State on Mechanical Behavior, Y.-N. Liu, J. A. Manson, W. F. Chen, and J. W. Vanderhoff, *May, p. 325*

110. Injection Molding

Distribution of Some Physical Properties in Injection-Molded Thermoplastic Parts, Z. Bakerdjian and M. R. Kamal, *February, p. 96*

Liquid Injection Molding. I. An Investigation of Impingement Mixing, S. C. Malguarnera and N. P. Suh, *February, p. 111*

Liquid Injection Molding. II. Mechanical Design and Characterization of a RIM Machine, S. C. Malguarnera and N. P. Suh, *February, p. 116*

The Effect of Orientation on the Mechanical Properties of Injection Molded Polystyrene, L. Hoare and D. Hull, *March, p. 204*

Low Cost Polyolefin Composites Containing Pulp Mill Wood Residue, G. R. Lightsey, P. H. Short, and V. K. K. Sinha, *May p. 305*

Glass Bead-Filled Polypropylene. Part II. Mold-Filling Studies during Injection Molding, L. R. Schmidt, *September, p. 666*

Structural Foam Molding of Incompatible Thermoplastics, James L. Throne, *September, p. 682*

Injection Molding in Disk-Shaped Cavities, J. F. Stevenson, A. Glaskoy, K. K. Wang, I. Chen and D. H. Reber, *September, p. 706*

On the Effect of Mechanical Energy on the Degradation of Polyethylene in the Solid State and in the Melt, A. Holmström, A. Andersson, and E. M. Sörvik, *October, p. 728*

Flow and Heat Transfer in the Nozzle of an Injection Molding Machine, R. E. Nunn and R. T. Fenner, *November, p. 811*

111. Ink

The Effect of Corona and Ozone Treatment on the Adhesion of Ink to the Surface of Polyethylene, M. Stradal and D. A. I. Goring, *January, p. 38*

112. Instrumentation

A Forced Torsional Oscillator For Dynamic Mechanical Measurements, W. M. Davis and C. W. Macosko, *January, p. 32*

Molecular Order and Orientation in Aromatic Polyamide Fibers by Internal Reflection Spectroscopy and Wide Angle X-ray Diffraction, F. Druschke, H. W. Siesler, G. Spilgies, and H. Tengler, *February, p. 93*

113. Interpenetrating Polymer Networks

Castor Oil Based Interpenetrating Polymer Networks IV. Mechanical Behavior, G. M. Yenwo, L. H. Sperling, J. Pulido, and J. A. Manson, *April, p. 251*

Crosslinking Systems in the Graft Polymerization of Chromium-Tanned Collagen, E. H. Harris and S. H. Feairheller, *May, p. 287*

Castor Oil Based Interpenetrating Polymer Networks. II. Synthesis and Properties of Emulsion Polymerized Products, N. Devia-Manjarres, G. Yenwo, J. Pulido, J. A. Manson, A. Coupe, and L. H. Sperling, *May, p. 294*

114. Irradiation

Effect of Olefin Structure on the Vapor-Development of Poly (Olefin Sulfones) Under Electron Irradiation, M. J. Bowden and L. F. Thompson, *April, p. 269*

Polyketones and Polysulfones for Conservation of Ethylene Polymers, M. Steinberg, *May, p. 335*

Theoretical Considerations on the Sensitivities of Electron Beam Resists, M. Tsuda, S. Oikawa, and A. Suzuki, *June, p. 390*

Differential Dissolution and Electron-Beam Lithographic Sensitivity of Poly(methyl methacrylate), J. N. Helbert, C. F. Cook, Jr., E. H. Poindexter, and B. E. Wagner, *June, p. 414*

Interfacial (Polymer-Substrate) Failure of Ultraviolet Radiation Curable Coatings, V. D. McGinniss and A. Kah, *July, p. 478*

Olefin-SO_2 Copolymers as Biomaterials, D. N. Gray, *October, p. 719*

K

115. Kinetics

Effect of Olefin Structure on the Vapor-Development of Poly(Olefin Sulfones) Under Electron Irradiation, M. J. Bowden and L. F. Thompson, *April, p. 269*

L

116. Latex

Castor Oil Based Interpenetrating Polymer Networks. II. Synthesis and Properties of Emulsion Polymerized Products, N. Devia-Manjarres, G. Yenwo, J. Pulido, J. A. Manson, A. Coupe, and L. H. Sperling, *May, p. 294*

117. Leather

Crosslinking Systems in the Graft Polymerization of Chromium-Tanned Collagen, E. H. Harris and S. H. Feairheller, *May, p. 287*

118. Light Stability

Light Stabilization of Flame Retardant Impact Polystyrene, R. Bradley, J. Farber, and L. Testa, *November, p. 782*

119. Light Transmittance

Thermodynamics of Plasticized Triblock Copolymers. Part II. Model Verification by Light Transmittance and Rheology, E. R. Pico and M. C. Williams, *August, p. 573*

120. Lithography

Polyimides in Lithography, R. K. Agnihotri, *June, p. 366*

Line-Profile Resist Development Simulation Techniques, R. E. Jewett, P. I. Hagouel, A. R. Neureuther, and T. Van Duzer, *June, p. 381*

X-Ray Lithography, R. Feder, E. Spiller, and J. Topalian, *June, p. 385*

Parameters Affecting the Sensitivity of Poly(methyl methacrylate) as a Positive Lithographic Resist, E. Gipstein, A. C. Ouano, D. E. Johnson, and O. U. Need, III, *June, p. 396*

Studies of Methyl Methacrylate-Methyl α-Chloroacrylate Copolymers and Poly(Methyl α-Chloroacrylate) as Electron Sensitive Positive Resists, J. H. Lai, L. T. Shepherd, R. Ulmer, and C. Griep, *June, p. 402*

The Synthesis, Characterization, Evaluation, and Processing of Selected Cyclo-Olefin Sulfone Copolymers as Electron Beam Resists, R. J. Himics, M. Kaplan, N. V. Desai, and E. S. Poliniak, *June, p. 406*

Thermally-Reacted Poly(methacrylamide) as a Positive Electron Beam Resist, S. Matsuda, S. Tsuchiya, M. Honma, K. Hasegawa, G. Nagamatsu, and T. Asano, *June, p. 410*

Differential Dissolution and Electron-Beam Lithographic Sensitivity of Poly(methyl methacrylate), J. N. Helbert, C. F. Cook, Jr., E. H. Poindexter, and B. E. Wagner, *June, p. 414*

Sensitive Chlorine-Containing Resists for X-Ray Lithography, G. N. Taylor, G. A. Coquin, and S. Somekh, *June, p. 420*

Interface Degradation Processes and Durability, D. H. Kaelble, *July, p. 474*

M

121. Machinery

Liquid Injection Molding. II. Mechanical Design and Characterization of a RIM Machine, S. C. Malguarnera and N. P. Suh, *February, p. 116*

Rubber Heat Engines, Analyses and Theory, R. J. Farris, *October, p. 737*

Flow and Heat Transfer in the Nozzle of an Injection Molding Machine, R. E. Nunn and R. T. Fenner, *November, p. 811*

122. Machining

Evaluation of Processing Factors on Turning of Thermoplastics, P. K. Roy and S. K. Basu, *October, p. 751*

123. Macroreticular Polymers

Polymeric Adsorbents for Treatment of Waste Effluents, R. Kunin, *January, p. 58*

124. Maleic Anhydride

Effects of Post-Curing of Unsaturated Polyester Resins in Various Media, S-A. Chen and P-K. Tsai, *November, p. 775*

125. Mats

Nylon Matting: A Textile Structure Used for Soil and Civil Engineering Applications, D. Godehn, *May, p. 317*

126. Mathematical Model

Physical Aging in Plastics and Other Glassy Materials, L. C. E. Struik, *March, p. 165*

New Block Copolymers of α-Amino Acids, F. Uralil, T. Hayashi, J. M. Anderson, and A. Hiltner, *August, p. 515*

Flow and Heat Transfer in the Nozzle of an Injection Molding Machine, R. E. Nunn and R. T. Fenner, *November, p. 811*

Influence of Composite Film Structure on Reflectance of Vacuum Metallized Plastics, D. W. Hoffman and R. A. Dickie, *December, p. 865*

127. Mechanical Properties

Frictional Behavior of Solid Polymers on a Metal Surface at Processing Conditions, C. I. Chung, W. J. Hennessey, and M. H. Tusim, *January, p. 9*

The Effect of Orientation on the Mechanical Properties of Injection Molded Polystyrene, L. Hoare and D. Hull, *March, p. 204*

Mechanical Properties of Mixtures of Two Compatible Polymers, A. F. Yee, *March, p. 213*

Oriented Short Glass Fiber Composites. III. Structure and Mechanical Properties of Molded Sheets, L. Kacir, M. Narkis, and O. Ishai, *April, p. 234*

Castor Oil Based Interpenetrating Polymer Networks IV. Mechanical Behavior, G. M. Yenwo, L. H. Sperling, J. Pulido, and J. A. Manson, *April, p. 251*

Reuse of Plastics from Solid Wastes, A. Ram, M. Narkis, and J. Kost, *April, p. 274*

Polymer-Impregnated Mortars. I. Effect of Polymer State on Mechanical Behavior, Y.-N. Liu, J. A. Manson, W. F. Chen, and J. W. Vanderhoff, *May, p. 325*

Properties and Applications of a Pitch Carbon Microsphere Composite, H. L. Price and J. B. Nelson, *May, p. 341*

Glass Bead-Filled Polypropylene. Part I. Rheological and Mechanical Properties, D. L. Falkner and L. R. Schmidt, *September, p. 657*

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly(Vinyl Chloride) and Chlorinated Polyethylene as Models for Polyethylene Recycle Qualities, A. Holmström and E. M. Sörvik, *September, p. 700*

Effects of Coupling Agents on the Mechanical and Rheological Properties of Mica-Reinforced Polypropylene, M.S. Boaira and C. E. Chaffey, *October, p. 715*

Effects of Post-Curing of Unsaturated Polyester Resins in Various Media, S-A. Chen and P-K. Tsai, *November, p. 775*

128. Mechanism

The Role of Intercrystalline Links in the Environmental Stress Cracking of High Density Polyethylene, P. D. Frayer, P. P. Tong, and W. W. Dreher, *January, p. 27*

Plastic Flow in Glassy Polymers, A. S. Argon and M. I. Bessonov, *March, p. 174*

A Water-Soluble, Reciprocity-Law-Failing Photoresist, M. Akagi, S. Nonogaki, T. Kohashi, Y. Oba, M. Oikawa, and Y. Tomita, *June, p. 353*

The Effect of Polymer Host on Volume Phase Holographic Recording Properties, A. Bloom, R. A. Bartolini, and P. L. K. Hung, *June, p. 356*

A Study of the Photochemical Reaction between Poly(vinyl alcohol) and Aqueous Chromate Ion, H. L. Van Nice and R. Farlee, *June, p. 359*

Polyimides in Lithography, R. K. Agnihortri, *June, p. 366*

Limiting Surface Tension by Gas Chromatography, J.-M. Braun and J. E. Guillet, *July, p. 434*

129. Melamine

A Study of the Effect of Pressure, Time, and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

130. Melt

Frictional Behavior of Solid Polymers on a Metal Surface at Processing Conditions,

C. I. Chung, W. J. Hennessey, and M. H. Tusim, *January, p. 9*

Wall Slip and Its Implications in the Design of Single Screw Melt-Fed Extruders, R. A. Worth and J. Parnaby, *April, p. 257*

The Examination of Poly(5-Hexene-2-One Sulfone) as a Positive-Working Photoresist, R. J. Himics and D. L. Ross, *June, p. 350*

Effect of Center Block Structure on the Physical and Rheological Properties of ABA Block Copolymers. Part II. Rheological Properties, S. Futamura and E. A. Meinecke, *August, p. 562*

Stratified Two-Phase Flow of Molten Polymers in Circular Dies, E. Uhland, *September, p. 671*

Transitions in Polymer Melts, L. E. Nielsen, *October, p. 713*

131. Melt Viscosity

Melt Characterization of Ultra High Molecular Weight Polyethylene Using Squeeze Flow, M. T. Shaw, *April, p. 266*

Viscoelastic Parameters of Characterized Branched Polyethylenes, A. Ram, *November, p. 793*

132. Membranes

Permeation and Sorption in Inhomogeneous Polymer Membranes, H. L. Frisch, *February, p. 81*

Porous Fabric Membranes for Soil Stabilization and Drainage, R. R. Miano, *May, p. 320*

Olefin-SO_2 Copolymers as Biomaterials, D. N. Gray, *October, p. 719*

133. Metallization

Polyimides in Lithography, R. K. Agnihotri, *June, p. 366*

X-Ray Lithography, R. Feder, E. Spiller, and J. Topalian, *June, p. 385*

The Role of the Interface in Adhesion Phenomena, K. L. Mittal, *July, p. 467*

Influence of Composite Film Structure on Reflectance of Vacuum Metallized Plastics, D. W. Hoffman and R. A. Dickie, *December, p. 865*

134. Metals

Rheology and Wire Coating of High Atomic Number Metal-Low Density Polyethylene Composites, D. M. Bigg, *October, p. 745*

Cobalticenium-Bridged Polybenzazoles. Part II. High Temperature Solution Polymerization in Ethylated Polyphosphoric Acid, E. W. Neuse and G. Horlbeck, *December, p. 821*

Influence of Composite Film Structure on Reflectance of Vacuum Metallized Plastics, D. W. Hoffman and R. A. Dickie, *December, p. 865*

135. Metric System

Using the SI Units, F. S. Conant, *April, p. 222*

136. Micellar Model

Small Angle X-Ray Scattering from Block Polymers. II. The Bulk State, A. D. Le Grand, G. G. Vitale, and D. G. LeGrand, *August, p. 598*

137. Micelle Formation

Micelle Formation by Butadiene-Styrene Block Polymers in *n*-Alkanes, C. J. Stacy and G. Kraus, *August, p. 627*

138. Microspheres

Properties and Applications of a Pitch Carbon Microsphere Composite, H. L. Price and J. B. Nelson, *May, p. 341*

139. Miscibility

Miscibility of Poly(Vinyl Chloride) with Ethylene and Ethyl Acrylate-Carbon Monoxide Terpolymers, L. M. Robeson and J. E. McGrath, *May, p. 300*

140. Moisture Content

Predicting the Service Life of Polysulfone in Steam or Hot Water, R. K. Dearing, *December, p. 832*

141. Molecular Model

Plastic Flow in Glassy Polymers, A. S. Argon and M. I. Bessonov, *March, p. 174*

Viscoelastic Properties of Homogeneous Block Copolymers, M. Shen, D. Soong, and D. R. Hansen, *August, p. 560*

Small Angle X-Ray Scattering from Block Polymers. II. The Bulk State, A. D. Le Grand, G. G. Vitale, and D. G. LeGrand, *August, p. 598*

142. Molecular Order

Molecular Order and Orientation in Aromatic Polyamide Fibers by Internal Reflection Spectroscopy and Wide Angle X-ray Diffraction, F. Druschke, H. W. Siesler, G. Spilgies, and H. Tengler, *February, p. 93*

143. Molecular Weight

Melt Characterization of Ultra High Molecular Weight Polyethylene Using Squeeze Flow, M. T. Shaw, *April, p. 266*

Effect of Center Block Structure on the Physical and Rheological Properties of ABA Block Copolymers. Part II. Rheological Properties, S. Futamura and E. A. Meinecke, *August, p. 562*

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly(Vinyl Chloride) and Chlorinated Polyethylene as Models for Polyethylene Recycle Qualities, A. Homström and E. M. Sörvik, *September, p. 700*

On the Effect of Mechanical Energy on the Degradation of Polyethylene in the Solid State and in the Melt, A. Holmström, A. Andersson, and E. M. Sörvik, *October, p. 726*

A Study of the Flow Properties of Rubbers Using Rheometrics Mechanical Spectrometer, D. P. Mukherjee, *November, p. 788*

Viscoelastic Parameters of Characterized Branched Polyethylenes, A. Ram, *November, p. 793*

Correlations for Zero-Shear and Shear-Rate Dependent Viscosity of Polymeric Solutions, B. Chitrangad, H. R. Osmers, and S. Middleman, *November, p. 806*

144. Molecular Weight Dependence

Fatigue Crack Propagation in Poly(Methyl Methacrylate): Effect of Molecular Weight and Internal Plasticization, S. L. Kim, M. Skibo, J. A. Manson, and R. W. Hertzberg, *March, p. 194*

Influence of Molecular Weight on Fatigue Behavior of Polyethylene and Polystyrene, J. A. Sauer, E. Foden, and D. R. Morrow, *April, p. 246*

A Study of the Photochemical Reaction between Poly(vinyl alcohol) and Aqueous Chromate Ion, H. L. Van Nice and R. Farlee, *June, p. 359*

Parameters Affecting the Sensitivity of Poly(methyl methacrylate) as a Positive Lithographic Resist, E. Gipstein, A. C. Ouano, D. E. Johnson, and O. U. Need, III, *June, p. 396*

The Synthesis, Characterization, Evaluation, and Processing of Selected Cyclo-Olefin Sulfone Copolymers as Electron Beam Resists, R. J. Himics, M. Kaplan, N. V. Desai, and E. S. Poliniak, *June, p. 406*

Sensitive Chlorine-Containing Resists for X-Ray Lithography, G. N. Taylor, G. A. Coquin, and S. Somekh, *June, p. 420*

Micelle Formation by Butadiene-Styrene Block Polymers in *n*-Alkanes, C. J. Stacy and G. Kraus, *August, p. 627*

Transitions in Polymer Melts, L. E. Nielsen, *October, p. 713*

Pressure-Specific Volume-Temperature Behavior of Thermoplastic Polymers Under Normal Processing Conditions, G. Menges and P. Thienel, *October, p. 758*

Correlation of Low Density Polyethylene Rheological Measurements with Optical and Processing Properties, M. Shida, R. N. Shroff, and L. V. Cancio, *November, p. 769*

145. Morphology

Powder Processing of Ultra-High Molecular Weight Polyethylene I. Powder Characterization and Compaction, G. W. Halldin and I. L. Kamel, *January, p. 21*

Plastic Deformation of Crystalline Polymers, A. Peterlin, *March, p. 183*

Polymer-Impregnated Mortars. I. Effect of Polymer State on Mechanical Behavior, Y.-N. Liu, J. A. Manson, W. F. Chen, and J. W. Vanderhoff, *May, p. 325*

Surface Modification of Polymers and Practical Adhesion, H. Schonhorn, H. L. Frisch, and G. L. Gaines, Jr., *July, p. 440*

Adhesion at Polypropylene—Cellophane Interfaces, A. Bialski, R. St. J. Manley, and H. P. Schreiber, *July, p. 456*

Structure and Properties of Microcomposites and Macrocomposites from Block Polymers, S. L. Aggarwal and R. A. Livigni, *August, p. 498*

Morphology and Organizational Characteristics of Poly(m-Phenylene Isophthalamide-b-Ethylene Oxide) Systems, J. F. Fellers, Y.-D. Lee, R. J. Zdrahala, and S. C. Horne, *August, p. 506*

Morphology and Properties of Crystalline Polyester-Siloxane Block Copolymers, J. J. O'Malley and W. J. Stauffer, *August, p. 510*

New Block Copolymers of α-Amino Acids, F. Uralil, T. Hayashi, J. M. Anderson, and A. Hiltner, *August, p. 515*

Diffusion and Solution of Gases and Vapors in Styrene-Butadiene Block Copolymers, H. Odani, K. Taira, N. Nemoto, and M. Kurata, *August, p. 527*

Thermodynamics of Plasticized Triblock Copolymers. Part II. Model Verification by Light Transmittance and Rheology, E. R.

Pico and M. C. Williams, *August, p. 573*

Domain-Boundary Structure of Styrene-Isoprene Block Copolymer Films Cast, from Solutions. III, Preliminary Results on Spherical Microdomains, A. Todo, H. Uno, K. Miyoshi, T. Hashimoto, and H. Kawai, *August, p. 587*

146. Mortar

Small Angle X-Ray Scattering from Block Polymers. II. The Bulk State, A. D. Le Grand, G. G. Vitale, and D. G. LeGrand, *August, p. 598*

Glass Bead-Filled Polypropylene. Part II. Mold-Filling Studies during Injection Molding, L. R. Schmidt, *September, p. 666*

N

147. Negative Electron Resists

Three Dimensional Behavior of Negative Electron Resists, R. D. Heidenreich and G. W. Kammlott, *June, p. 377*

Sensitive Chlorine-Containing Resists for X-Ray Lithography, G. N. Taylor, G. A. Coquin, and S. Somekh, *June, p. 420*

148. Nylon

Plastic Deformation of Crystalline Polymers, A. Peterlin, *March, p. 183*

Nylon Matting: A Textile Structure Used for Soil and Civil Engineering Applications, D. Godehn, *May, p. 317*

Evaluation on Processing Factors on Turning of Thermoplastics, P. K. Roy and S. K. Basu, *October, p. 751*

O

149. Optical Properties

Pressure-Specific Volume-Temperature Behavior of Thermoplastic Polymers Under Normal Processing Conditions, G. Menges and P. Thienel, *October, p. 758*

Correlation of Low Density Polyethylene Rheological Measurements with Optical and Processing Properties, M. Shida, R. N. Shroff, and L. V. Cancio, *November, p. 769*

150. Orientation

Molecular Order and Orientation in Aromatic Polyamide Fibers by Internal Reflection Spectroscopy and Wide Angle X-ray Diffraction, F. Druschke, H. W. Siesler, G. Spilgies, and H. Tengler, *February, p. 93*

The Deep Drawing of Thermoplastics, M. J. Miles and N. J. Mills, *February, p. 101*

The Effect of Orientation on the Mechanical Properties of Injection Molded Polystyrene, L. Hoare and D. Hull, *March, p. 204*

Oriented Short Glass Fiber Composites. III. Structure and Mechanical Properties of Molded Sheets, L. Kacir, M. Narkis, and O. Ishai, *April, p. 234*

Unit Cell Deformation under Elongational Stress of Oriented SIS Three-Block Copolymers, A. Mathis, G. Hadziioannou, and A. Skoulios, *August, p. 570*

Monte Carlo Studies of Isolated AB Block Copolymers Molecules, J. Bendler and K. Solc, *August, p. 622*

Thermal Treatment of Cold-Formed Poly(vinyl chloride), T. E. Brady and S. A. Jabarin, *September, p. 686*

151. Oxidation

A Study of the Photochemical Reaction between Poly(vinyl alcohol) and Aqueous Chromate Ion, H. L. Van Nice and R. Farlee, *June, p. 359*

152. Oxydiphenyl

Plastic Flow in Glassy Polymers, A. S. Argon and M. I. Bessonov, *March, p. 174*

153. Ozone

The Effect of Corona and Ozone Treatment on the Adhesion of Ink to the Surface of Polyethylene, M. Stradal and D. A. I. Goring, *January, p. 38*

P

154. Particle Size

Powder Processing of Ultra-High Molecular Weight Polyethylene I. Powder Characterization and Compaction, G. W. Halldin and I. L. Kamel, *January, p. 21*

155. Peeling

Peel Mechanics of Adhesive Joints, A. N. Gent and G. R. Hamed, *July, p. 462*

156. Permeability

The Role of Polymers in Optimizing Therapeutic Effectiveness of Drugs, H. Leeper and H. Benson, *January, p. 42*

Permeation and Sorption in Inhomogeneous Polymer Membranes, H. L. Frisch, *February, p. 81*

Diffusion and Solution of Gases and Vapors in Styrene-Butadiene Block Copolymers, H. Odani, K. Taira, N. Nemoto, and M. Kurata, *August, p. 527*

Olefin-SO_2 Copolymers as Biomaterials, D. N. Gray, *October, p. 719*

157. Phase Inversion

Emulsifying Properties of Block Copolymers. Oil-Water Emulsions and Microemulsion, G. Riess, J. Nervo, and D. Rogez, *August, p. 634*

158. Phase Separation

Transition Behavior and Phase Segregation in TDI Polyurethanes, N. S. Schneider and C. S. Paik Sung, *February, p. 73*

Pulsed Nuclear Magnetic Resonance for Studying Phase Separation in Block and Segmented Polymers, R. A. Assink and G. L. Wilkes, *August, p. 606*

159. Photochemical Reactions

A Water-Soluble, Reciprocity-Law-Failing Photoresist, M. Akagi, S. Nonogaki, T. Kohashi, Y. Oba, M. Oikawa, and Y. Tomita, *June, p. 353*

A Study of the Photochemical Reaction between Poly(vinyl alcohol) and Aqueous Chromate Ion, H. L. Van Nice and R. Farlee, *June, p. 359*

160. Photopolymerization

Interfacial (Polymer-Substrate) Failure of Ultraviolet Radiation Curable Coatings, V. D. McGinniss and A. Kah, *July, p. 478*

161. Photoresists

The Examination of Poly(5-Hexene-2-One Sulfone) as a Positive-Working Photoresist, R. J. Himics and D. L. Ross, *June, p. 350*

A Water-Soluble, Reciprocity-Law-Failing Photoresist, M. Akagi, S. Nonogaki, T. Kohashi, Y. Oba, M. Oikawa, and Y. Tomita, *June, p. 353*

New Photoresists of Cyclized Butadiene Polymers, Y. Harita, M. Ichikawa, K. Harada, and T. Tsunoda, *June, p. 372*

Three Dimensional Behavior of Negative Electron Resists, R. D. Heidenreich and G. W. Kammlott, *June, p. 377*

X-Ray Lithography, R. Feder, E. Spiller, and J. Topalian, *June, p. 385*

Theoretical Considerations on the Sensitivities of Electron Beam Resists, M. Tsuda, S. Oikawa, and A. Suzuki, *June, p. 390*

Parameters Affecting the Sensitivity of Poly(methyl methacrylate) as a Positive Lithographic Resist, G. Gipstein, A. C. Ouano, D. E. Johnson, and O. U. Need, III, *June, p. 396*

Studies of Methyl Methacrylate-Methyl α-Chloroacrylate Copolymers and Poly(Methyl α-Chloroacrylate) as Electron Sensitive Positive Resists, J. H. Lai, L. T. Shepherd, R. Ulmer, and Griep, *June, p. 402*

162. Phthalic Anhydride

Effects of Post-Curing of Unsaturated Polyester Resins in Various Media, S-A. Chen and P-K. Tsai, *November, p. 775*

163. Physical Properties

Azidosilane Polymer—Filler Coupling Agent, G. A. McFarren, T. F. Sanderson, and F. G. Schappell, *January, p. 46*

Polymeric Adsorbents for Treatment of Waste Effluents, R. Kunin, *January, p. 58*

Transition Behavior and Phase Segregation in TDI Polyurethanes, N. S. Schneider and C. S. Paik Sung, *February, p. 73*

Distribution of Some Physical Properties in Injection-Molded Thermoplastic Parts, Z. Bakerdjian and M. R. Kamal, *February, p. 96*

Plastic Flow in Glassy Polymers, A. S. Argon and M. I. Bessonov, *March, p. 174*

Castor Oil Based Interpenetrating Polymer Networks IV. Mechanical Behavior, G. M. Yenwo, L. H. Sperling, J. Pulido, and J. A. Manson, *April, p. 251*

Low Cost Polyolefin Composites Containing Pulp Mill Wood Residue, G. R. Lightsey, P. H. Short, and V. K. K. Sinha, *May, p. 305*

New Photoresists of Cyclized Butadiene Polymers, Y. Harita, M. Ichikawa, K. Harada, and T. Tsunoda, *June, p. 372*

The Synthesis, Characterization, Evaluation, and Processing of Selected Cyclo-Olefin Sulfone Copolymers as Electron

Beam Resists, R. J. Himics, M. Kaplan, N. V. Desai, and E. S. Poliniak, *June, p. 406*

Sensitive Chlorine-Containing Resists for X-Ray Lithography, G. N. Taylor, G. A. Coquin, and S. Somekh, *June, p. 420*

Adhesion Effects and Performance of Mass Transfer Equipment Using Teflon Surfaces, A. B. Ponter, *July, p. 484*

Structure and Properties of Microcomposites and Macrocomposites from Block Polymers, S. L. Aggarwal and R. A. Livigni, *August, p. 498*

Structural Foam Molding of Incompatible Thermoplastics, J. L. Throne, *September, p. 682*

Thermal Treatment of Cold-Formed Poly(vinyl chloride), T. E. Brady and S. A. Jabarin, *September, p. 686*

Injection Molding in Disk-Shaped Cavities, J. F. Stevenson, A. Galskoy, K. K. Wang, I. Chen and D. H. Reber, *September, p. 706*

Olefin-SO_2 Copolymers as Biomaterials, D. N. Gray, *October, p. 719*

Predicting the Service Life of Polysulfone in Steam or Hot Water, R. K. Dearing, *December, p. 832*

Craze and Creep Resistance of High-Impact Polystyrene in Alcohols, D. McCammond and V. S. Hoa, *December, p. 869*

164. Pitch Carbon

Properties and Applications of a Pitch Carbon Microsphere Composite, H. L. Price and J. B. Nelson, *May, p. 341*

165. Plasticization

Fatigue Crack Propagation in Poly(Methyl Methacrylate): Effect of Molecular Weight and Internal Plasticization, S. L. Kim, M. Skibo, J. A. Manson, and R. W. Hertzberg, *March, p. 194*

166. Plasticizers

Fatigue Crack Propagation in Poly(Methyl Methacrylate): Effect of Molecular Weight and Internal Plasticization, S. L. Kim, M. Skibo, J. A. Manson, and R. W. Hertzberg, *March, p. 194*

167. Plastics

Stress Cracking of Plastics by Gasoline and Gasoline Components, M. G. Wyzgoski and C. H. M. Jacques, *December, p. 854*

Influence of Composite Film Structure on Reflectance of Vacuum Metallized Plastics, D. W. Hoffman and R. A. Dickie, *December, p. 865*

168. Polarity

Polymeric Adsorbents for Treatment of Waste Effluents, R. Kunin, *January, p. 58*

169. Polyacrylamide

Limiting Surface Tension by Gas Chromatography, J.-M. Braun and J. E. Guillet, *July, p. 434*

A Study of the Effect of Pressure, Time, and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

170. Polyacrylonitrile

Limiting Surface Tension by Gas Chromatography, J.-M. Braun and J. E. Guillet, *July, p. 434*

171. Polyamides

Molecular Order and Orientation in Aromatic Polyamide Fibers by Internal Reflection Spectroscopy and Wide Angle X-ray Diffraction, F. Druschke, H. W. Siesler, G. Spilgies, and H. Tengler, *February, p. 93*

172. Polyamide-imides

Polyimides in Lithography, R. K. Agnihotri, *June, p. 366*

A Study of the Effect of Pressure, Time, and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

173. Polybenzazoles

Cobalticenium-Bridged Polybenzazoles. Part II. High Temperature Solution Polymerization in Ethylated Polyphosphoric Acid, E. W. Neuse and G. Horlbeck, *December, p. 821*

174. Polybenzimidazoles

Cobalticenium-Bridged Polybenzazoles. Part II. High Temperature Solution Polymerization in Ethylated Polyphosphoric Acid, E. W. Neuse and G. Horlbeck, *December, p. 821*

175. Polybutadiene

New Photoresists of Cyclized Butadiene Polymers, Y. Harita, M. Ichikawa, K. Harada, and T. Tsunoda, *June, p. 372*

Structural and Mechanical Properties of an S-B-S Copolymer, J. A. Odell and A. Keller, *August, p. 544*

ESR Studies of Polymer Transitions. IV. Spin-Probe Studies of Styrene Block Copolymers, P. L. Kumler, S. E. Keinath, and R. F. Boyer, *August, p. 613*

The Influence of Diblock Copolymers on the Structure and Properties of Polybutadiene-Polyisoprene Blends, A. R. Ramos and R. E. Cohen, *August, p. 639*

176. Polycarbonate

Frictional Behavior of Solid Polymers on a Metal Surface at Processing Conditions, C. I. Chung, W. J. Hennessey, and M. H. Tusim, *January, p. 9*

A Forced Torsional Oscillator For Dynamic Mechanical Measurements, W. M. Davis and C. W. Macosko, *January, p. 32*

The Deep Drawing of Thermoplastics, M. J. Miles and N. J. Mills, *February, p. 101*

Fracture Mechanics of Polymers, J. G. Williams, *March, p. 144*

Deformation, Yield and Fracture of Polymers at High Pressure, J. A. Sauer, *March, p. 150*

Bisphenol-A-Polycarbonate-Bisphenol-A-Polysulfone Block Copolymers, J. E. McGrath, T. C. Ward, E. Shchori, and A. J. Wnuk, *August, p. 647*

Conductive Polymeric Compositions, D. M. Bigg, *December, p. 842*

Stress Cracking of Plastics by Gasoline and Gasoline Components, M. G. Wyzgoski and C. H. M. Jacques, *December, p. 854*

177. Polydimethyl-p-phenylene Oxide

Mechanical Properties of Mixtures of Two Compatible Polymers, A. F. Yee, *March, p. 213*

178. Polydimethyl Siloxane

Small Angle X-Ray Scattering from Block Polymers. II. The Bulk State, A. D. Le Grand, G. G. Vitale, and D. G. LeGrand, *August, p. 598*

ESR Studies of Polymer Transitions. IV. Spin-Probe Studies of Styrene Block Copolymers, P. L. Kumler, S. E. Keinath, and R. F. Boyer, *August, p. 613*

179. Polyelectrolytes

Effects of Orientation and Chemical Structure on the Strength Properties of Some Polymers, M. Takano and L. E. Nielsen, *April, p. 229*

180. Polyesters

Techniques for Compounding Glass Fiber-Reinforced Thermoplastics, K. Stade, *January, p. 50*

Transition Behavior and Phase Segregation in TDI Polyurethanes, N. S. Schneider and C. S. Paik Sung, *February, p. 73*

Flexural Fatigue of Undirectional Fiberglass-Reinforced Polyester, D. G. Fesko, *April, p. 242*

The Effect of Polymer Host on Volume Phase Holographic Recording Properties, A. Bloom, R. A. Bartolini, and P. L. K. Hung, *June, p. 356*

Pulsed Nuclear Magnetic Resonance for Studying Phase Separation in Block and Segmented Copolymers, R. A. Assink and G. L. Wilkes, *August, p. 606*

Effects of Post-Curing of Unsaturated Polyester Resins in Various Media, S-A. Chen and P-K. Tsai, *November, p. 775*

181. Polyethylene

Frictional Behavior of Solid Polymers on a Metal Surface at Processing Conditions, C. I. Chung, W. J. Hennessey, and M. H. Tusim, *January, p. 9*

Powder Processing of Ultra-High Molecular Weight Polyethylene I. Powder Characterization and Compaction, G. W. Halldin and I. L. Kamel, *January, p. 21*

The Effect of Corona and Ozone Treatment on the Adhesion of Ink to the Surface of Polyethylene, M. Stradal and D. A. I. Goring, *January, p. 38*

Solubility of Supercritical Gases in Polymers—A Review, D. C. Bonner, *February, p. 65*

Distribution of Some Physical Properties in Injection-Molded Thermoplastic Parts, Z. Bakerdjian and M. R. Kamal, *February, p. 96*

Effects of Orientation and Chemical Structure on the Strength Properties of Some Polymers, M. Takano and L. E. Nielsen, *April, p. 229*

Influence of Molecular Weight on Fatigue Behavior of Polyethylene and Polystyrene, J. A. Sauer, E. Foden, and D. R. Morrow, *April, p. 246*

Wall Slip and Its Implications in the Design of Single Screw Melt-Fed Extruders, R. A. Worth and J. Parnaby, *April, p. 257*

Melt Characterization of Ultra High Molecular Weight Polyethylene Using Squeeze Flow, M. T. Shaw, *April, p. 266*

Reuse of Plastics from Solid Wastes, A. Ram, M. Narkis, and J. Kost, *April, p. 274*

Low Cost Polyolefin Composites Containing Pulp Mill Wood Residue, G. R. Lightsey, P. H. Short, and V. K. K. Sinha, *May, p. 305*

Polyketones and Polysulfones for Conservation of Ethylene Polymers, M. Steinberg, *May, p. 335*

Theoretical Considerations on the Sensitivities of Electron Beam Resists, M. Tsuda, S. Oikawa, and A. Suzuki, *June, p. 390*

Stratified Two-Phase Flow of Molten Polymers in Circular Dies, E. Uhland, *September, p. 671*

Structural Foam Molding of Incompatible Thermoplastics, J. L. Throne, *September, p. 682*

A Study of the Effect of Pressure, Time, and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly(Vinyl Chloride) and Chlorinated Polyethylene as Models for Polyethylene Recycle Qualities, A. Holmström and E. M. Sörvik, *September, p. 700*

On the Effect of Mechanical Energy on the Degradation of Polyethylene in the Solid State and in the Melt, A. Holmström, A. Andersson, and E. M. Sörvik, *October, p. 728*

Rheology and Wire Coating of High Atomic Number Metal-Low Density Polyethylene Composites, D. M. Bigg, *October, p. 745*

Pressure-Specific Volume-Temperature Behavior of Thermoplastic Polymers Under Normal Processing Conditions, G. Menges and P. Thienel, *October, p. 758*

Correlation of Low Density Polyethylene Rheological Measurements with Optical and Processing Properties, M. Shida, R. N. Shroff, and L. V. Cancio, *November, p. 769*

Viscoelastic Parameters of Characterized Branched Polyethylenes, A. Ram, *November, p. 793*

182. Polyethylene Terephthalate

Plastic Flow in Glassy Polymers, A. S. Argon and M. I. Bessonov, *March, p. 174*

Plastic Deformation of Crystalline Polymers, A. Peterlin, *March, p. 183*

183. Polyimides

Polyimides in Lithography, R. K. Agnihotri, *June, p. 366*

184. Polyisobutylene

Solubility of Supercritical Gases in Polymers—A Review, D. C. Bonner, *February, p. 65*

Theoretical Considerations on the Sensitivities of Electron Beam Resists, M. Tsuda, S. Oikawa, and A. Suzuki, *June, p. 390*

Correlations for Zero-Shear and Shear-Rate Dependent Viscosity of Polymeric Solutions, B. Chitrangad, H. R. Osmers, and S. Middleman, *November, p. 806*

185. Polyisoprene

Domain-Boundary Structure of Styrene-Isoprene Block Copolymer Films Cast from Solutions. III. Preliminary Results on Spherical Microdomains, A. Todo, H. Uno, K. Myoshi, T. Hashimoto, and H. Kawai, *August, p. 587*

The Influence of Diblock Copolymers on the Structure and Properties of Polybutadiene-Polyisoprene Blends, A. R. Ramos and R. E. Cohen, *August, p. 639*

A Study of the Flow Properties of Rubbers Using Rheometrics Mechanical Spectrometer, D. P. Mukherjee, *November, p. 788*

Adhesive Properties of Star-Shaped Block Copolymers, G. C. Meyer and J. M. Widmaier, *November, p. 803*

186. Polyketones

Polyketones and Polysulfones for Conservation of Ethylene Polymers, M. Steinberg, *May, p. 335*

187. Polymerization

Cobalticenium-Bridged Polybenzazoles. Part II. High Temperature Solution Polymerization in Ethylated Polyphosphoric Acid, E. W. Neuse and G. Horlbeck, *December, p. 821*

188. Polymers

The Role of Polymers in Optimizing Therapeutic Effectiveness of Drugs, H. Leeper and H. Benson, *January, p. 42*

189. Polymer Surfaces

Surface Modification of Polymers and Practical Adhesion, H. Schonhorn, H. L. Frisch, and G. L. Gaines, Jr., *July, p. 440*

190. Polymethacrylamide

Thermally-Reacted Poly(methacrylamide) as a Positive Electron Beam Resist, S. Matsuda, S. Tsuchiya, M. Honma, K. Hasegawa, G. Nagamatsu, and T. Asano, *June, p. 410*

191. Polymethyl Methacrylate

Frictional Behavior of Solid Polymers on a Metal Surface at Processing Conditions, C. I. Chung, W. J. Hennessey, and M. H. Tusim, *January, p. 9*

A Forced Torsional Oscillator For Dynamic Mechanical Measurements, W. M. Davis and C. W. Macosko, *January, p. 32*

Solubility of Supercritical Gases in Polymers—A Review, D. C. Bonner, *February, p. 65*

Fracture Mechanics of Polymers, J. G. Williams, *March, p. 144*

Deformation, Yield and Fracture of Polymers at High Pressure, J. A. Sauer, *March, p. 150*

Plastic Flow in Glassy Polymers, A. S. Argon and M. I. Bessonov, *March p. 174*

Fatigue Crack Propagation in Poly(Methyl Methacrylate): Effect of Molecular Weight and Internal Plasticization, S. L. Kim, M. Skibo, J. A. Manson, and R. W. Hertzberg, *March, p. 194*

Polymer-Impregnated Mortars. I. Effect of Polymer State on Mechanical Behavior, Y.-N. Liu, J. A. Manson, W. F. Chen, and J. W. Vanderhoff, *May, p. 325*

Parameters Affecting the Sensitivity of Poly(methyl methacrylate) as a Positive Lithographic Resist, E. Gipstein, A. C. Ouano, D. E. Johnson, and O. U. Need, III, *June, p. 396*

Differential Dissolution and Electron-Beam Lithographic Sensitivity of Poly(methyl methacrylate), J. N. Helbert, C. F. Cook, Jr., E. H. Poindexter, and B. E. Wagner, *June, p. 414*

Limiting Surface Tension by Gas Chromatography, J.-M. Braun and J. E. Guillet, *July, p. 434*

Oligomeric Fluorinated Additives as Surface Modifiers for Solid Polymers, M. K. Bernett, *July, p. 450*

Small Angle X-Ray Scattering from Block Polymers. II. The Bulk State, A. D. Le Grand, G. G. Vitale, and D. G. LeGrand, *August, p. 598*

A Study of the Effect of Pressure, Time, and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

Charpy Tests on Brittle Polymers, A. G. M. Tak, *October, p. 733*

Stress Cracking of Plastics by Gasoline and Gasoline Components, M. G. Wyzgoski and C. H. M. Jacques, *December, p. 854*

192. Polyolefins

Low Cost Polyolefin Composites Containing Pulp Mill Wood Residue, G. R. Lightsey, P. H. Short, and V. K. K. Sinha, *May, p. 305*

Olefin-SO_2 Compolymers as Biomaterials, D. N. Gray, *October, p. 719*

193. Polyolefin Sulfone

Effect of Olefin Structure on the Vapor-Development of Poly (Olefin Sulfones) Under Electron Irradiation, M. J. Bowden and L. F. Thompson, *April, p. 269*

The Examination of Poly(5-Hexene-2-One Sulfone) as a Positive-Working Photoresist, R. J. Himics and D. L. Ross, *June, p. 350*

The Synthesis, Characterization, Evaluation, and Processing of Selected Cyclo-Olefin Sulfone Copolymers as Electron Beam Resists, R. J. Himics, M. Kaplan, N. V. Desai, and E. S. Poliniak, *June, p. 406*

194. Polyoxymethylene

The Deep Drawing of Thermoplastics, M. J. Miles and N. J. Mills, *February, p. 101*

Deformation, Yield and Fracture of Polymers at High Pressure, J. A. Sauer, *March, p. 150*

195. Polypeptides

New Block Copolymers of α-Amino Acids, F. Uralil, T. Hayashi, J. M. Anderson, and A. Hiltner, *August, p. 515*

Structure of AB Block Copolymers with a Polypeptide Block: Effect of the Chain Conformation, A. Douy and B. Gallot, *August, p. 523*

196. Polyphenylene Oxide

Plastic Flow in Glassy Polymers, A. S. Argon and M. I. Bessonov, *March, p. 174*

Study of the Effect of Pressure, Time, and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

197. Polypropylene

Frictional Behavior of Solid Polymers on a Metal Surface at Processing Conditions, C. I. Chung, W. J. Hennessey, and M. H. Tusim, *January, p. 9*

Azidosilane Polymer—Filler Coupling Agent, G. A. McFarren, T. F. Sanderson, and F. G. Schappell, *January, p. 46*

Solubility of Supercritical Gases in Polymers—A Review, D. C. Bonner, *February, p. 65*

Adhesion at Polypropylene—Cellophane Interfaces, A. Bialski, R. St. J. Manley and H. P. Schreiber, *July, p. 456*

Glass Bead-Filled Polypropylene. Part I. Rheological and Mechanical Properties, D. L. Faulkner and L. R. Schmidt, *September, p. 657*

Glass Bead-Filled Polypropylene. Part II. Mold-Filling Studies during Injection Molding, L. R. Schmidt, *September, p. 666*

Structural Foam Molding of Incompatible Thermoplastics, J. L. Throne, *September, p. 682*

A Study of the Effect of Pressure, Time and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

Injection Molding in Disk-Shaped Cavities, J. F. Stevenson, A. Galskoy, K. K. Wang, I. Chen and D. H. Reber, *September, p. 706*

Effects of Coupling Agents on the Mechanical and Rheological Properties of Mica-Reinforced Polypropylene, M. S. Boaira and C. E. Chaffey, *October, p. 715*

Conductive Polymeric Compositions, D. M. Bigg, *December, p. 842*

198. Polysaccharides

Graft Copolymers of Polysaccharides with Thermoplastic Polymers. A New Type of Filled Plastic, E. B. Bagley, G. F. Fanta, R. C. Burr, W. M. Doane, and C. R. Russell, *May, p. 311*

199. Polystyrene

The Rheology of Suspensions of Titanate Fibers in Polymer Solution, S. Onogi, Y. Mikami, and T. Matsumoto, *January, p. 1*

Frictional Behavior of Solid Polymers on a Metal Surface at Processing Conditions, C. I. Chung, W. J. Hennessey, and M. H. Tusim, *January, p. 9*

Azidosilane Polymer—Filler Coupling Agent, G. A. McFarren, T. F. Sanderson, and F. G. Schappell, *January, p. 46*

Solubility of Supercritical Gases in Polymers—A Review, D. C. Bonner, *February, p. 65*

Distribution of Some Physical Properties in Injection-Molded Thermoplastic Parts, Z. Bakerdjian and M. R. Kamal, *February, p. 96*

Fracture Mechanics of Polymers, J. G. Williams, *March, p. 144*

Deformation, Yield and Fracture of Polymers at High Pressure, J. A. Sauer, *March, p. 150*

Plastic Flow in Glassy Polymers, A. S. Argon and M. I. Bessonov, *March, p. 174*

The Effect of Orientation on the Mechanical Properties of Injection Molded Polystyrene, L. Hoare and D. Hull, *March, p. 204*

Mechanical Properties of Mixtures of Two Compatible Polymers, A. F. Yee, *March, p. 213*

Influence of Molecular Weight on Fatigue Behavior of Polyethylene and Polystyrene, J. A. Sauer, E. Foden, and D. R. Morrow, *April, p. 246*

Castor Oil Based Interpenetrating Polymer Networks IV. Mechanical Behavior, G. M. Yenwo, L. H. Sperling, J. Pulido, and J. A. Manson, *April, p. 251*

Reuse of Plastics from Solid Wastes, A. Ram, M. Narkis, and J. Kost, *April, p. 274*

Castor Oil Based Interpenetrating Polymer Networks, II. Synthesis and Properties of Emulsion Polymerized Products, N. Devia-Manjarres, G. Yenwo, J. Pulido, J. A. Manson, A. Coupe, and L. H. Sperling, *May, p. 294*

Low Cost Polyolefin Composites Containing Pulp Mill Wood Residue, G. R. Lightsey, P. H. Short, and V. K. K. Sinha, *May, p. 305*

Polymer-Impregnated Mortars. I. Effect of Polymer State on Mechanical Behavior, Y.-N. Liu, J. A. Manson, W. F. Chen, and J. W. Vanderhoff, *May, p. 325*

Limiting Surface Tension by Gas Chromatography, J.-M. Braun and J. E. Guillet, *July, p. 434*

Oligomeric Fluorinated Additives as Surface Modifiers for Solid Polymers, M. K. Bernett, July, p. 450

Structural and Mechanical Properties of an S-B-S Copolymer, J. A. Odell and A. Keller, *August, p. 544*

Effect of Center Block Structure on the Physical and Rheological Properties of ABA Block Copolymers. Part II. Rheological Properties, S. Futamura and E. A. Meinecke, *August, p. 562*

Domain-Boundary Structure of Styrene-Isoprene Block Copolymer Films Cast from Solutions. III. Preliminary Results on Spherical Microdomains, A. Todo, H. Uno, K. Miyoski, T. Hashimoto, and H. Kawai, *August, p. 587*

ESR Studies of Polymer Transitions. IV. Spin-Probe Studies of Styrene Block Copolymers, P. L. Kumler, S. E. Keinath, and R. F. Boyer, *August, p. 613*

Structural Foam Molding of Incompatible Thermoplastics, J. L. Throne, *September, p. 682*

Effects of Post-Curing of Unsaturated Polyester Resins in Various Media S-A. Chen and P-K. Tsai, *November, p. 775*

Light Stabilization of Flame Retardant Impact Polystyrene, R. Bradley, J. Farber, and L. Testa, *November, p. 782*

Adhesive Properties of Star-Shaped Block Copolymers, G. C. Meyer and J. M. Widmaier, *November, p. 803*

Correlations for Zero-Shear and Shear-Rate Dependent Viscosity of Polymeric Solutions, B. Chitrangad, H. R. Osmers, and S. Middleman, *November, p. 806*

Craze and Creep Resistance of High-Impact Polystyrene in Alcohols, D. McCammond and V. S. Hoa, *December, p. 869*

200. Polysulfone

Deformation, Yield and Fracture of Polymers at High Pressure, J. A. Sauer, *March, p. 150*

Effect of Olefin Structure on the Vapor-Development of Poly(Olefin Sulfones) Under Electron Irradiation, M. J. Bowden and L. F. Thompson, *April, p. 269*

Polyketones and Polysulfones for Conservation of Ethylene Polymers, M. Steinberg, *May, p. 335*

Bisphenol-A-Polycarbonate-Bisphenol-A-Polysulfone Block Copolymers, J. E. McGrath, T. C. Ward, E. Shchori, and A. J. Wnuk, *August, p. 647*

Study of the Effect of Pressure, Time, and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

Predicting the Service Life of Polysulfone in Steam or Hot Water, R. K. Dearing, *December, p. 832*

201. Polytetrafluoroethylene

Deformation, Yield and Fracture of Polymers at High Pressure, J. A. Sauer, *March, p. 150*

Adhesion Effects and Performance of Mass Transfer Equipment Using Teflon Surfaces, A. B. Ponter, *July, p. 484*

A Study of the Effect of Pressure, Time, and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

Evaluation of Processing Factors on Turning of Thermoplastics, P. K. Roy and S. K. Basu, *October, p. 751*

202. Polyurethanes

Transition Behavior and Phase Segregation in TDI Polyurethanes, N. S. Schneider and C. S. Paik Sung, *February, p. 73*

Liquid Injection Molding. II. Mechanical Design and Characterization of a RIM Machine, S. C. Malguarnera and N. P. Suh, *February, p. 116*

The Evaluation of Internal Cracking in Polyurethane Adhesives, F. Swanson, *February, p. 122*

Strength of Elastomers—A Perspective, T. L. Smith, *March, p. 129*

Pulsed Nuclear Magnetic Resonance for Studying Phase Separation in Block and Segmented Copolymers, R. A. Assink and G. L. Wilkes, *August, p. 606*

203. Polyvinyl Alcohol

A Study of the Photochemical Reaction between Poly(vinyl alcohol) and Aqueous Chromate Ion, H. L. Van Nice and R. Farlee, *June, p. 359*

204. Polyvinyl Chloride

Miscibility of Poly(vinyl Chloride) with Ethylene and Ethyl Acrylate-Carbon Monoxide Terpolymers, L. M. Robeson and J. E. McGrath, *May, p. 300*

Limiting Surface Tension by Gas Chromatography, J.-M. Braun and J. E. Guillet, *July, p. 434*

Thermal Treatment of Cold-Formed Poly(vinyl chloride), T. E. Brady and S. A. Jabarin, *September, p. 686*

A Study of the Effect of Pressure, Time, and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly(Vinyl Chloride) and Chlorinated Polyethylene as Models for Polyethylene Recycle Qualities, A. Holmström and E. M. Sörvik, *September, p. 700*

Effect of Additives on the Melt Elastic Modulus of Rigid Poly(Vinyl Chloride) R. G. Gough and I-J. Chen, *October, p. 762*

205. Polyvinylidene Chloride

Oligomeric Fluorinate Additives as Surface Modifiers for Solid Polymers, M. K. Bernett, *July, p. 450*

206. Positive Resists

Parameters Affecting the Sensitivity of Poly(methyl methacrylate) as a Positive Lithographic Resist, E. Gipstein, A. C. Ouano, D. E. Johnson, and O. U. Need, III, *June, p. 396*

Studies of Methyl Methacrylate-Methyl α-Chloroacrylate Copolymers and Poly(Methyl α-Chloroacrylate) as Electron Sensitive Positive Resists, J. H. Lai, L. T. Shepherd, R. Ulmer, and C. Griep, *June, p. 402*

207. Powder Processing

Powder Processing of Ultra-High Molecular Weight Polyethylene I. Powder Characterization and Compaction, G. W. Halldin and I. L. Kamel, *January, p. 21*

A Study of the Effect of Pressure, Time, and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

208. Powders

Powder Processing of Ultra-High Molecular Weight Polyethylene I. Powder Characterization and Compaction, G. W. Halldin and I. L. Kamel, *January, p. 21*

A Study of the Effect of Pressure, Time, and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

209. Pressure Dependence

Frictional Behavior of Solid Polymers on a Metal Surface at Processing Conditions, C. I. Chung, W. J. Hennessey, and M. H. Tusim, *January, p. 9*

Deformation, Yield and Fracture of Polymers at High Pressure, J. A. Sauer, *March, p. 150*

Glass Bead-Filled Polypropylene. Part II. Mold-Filling Studies during Injection, Molding, L. R. Schmidt, *September, p. 666*

Stratified Two-Phase Flow of Molten Polymers in Circular Dies, E. Uhland, *September, p. 671*

A Study of the Effect of Pressure, Time, and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

Injection Molding in Disk-Shaped Cavities, J. F. Stevenson, A. Galskoy, K. K. Wang, I. Chen, and D. H. Reber, *September, p. 706*

Pressure-Specific Volume-Temperature Behavior of Thermoplastic Polymers Under Normal Processing Conditions, G. Menges and P. Thienel, *October, p. 758*

Correlation of Low Density Polyethylene Rheological Measurements with Optical and Processing Properties, M. Shida, R. N. Shroff, and L. V. Cancio, *November, p. 769*

Effect of Cross-Linking on Hydrostatic Creep of Epoxy, W. N. Findley and R. M. Reed, *December, p. 837*

210. Processing

Frictional Behavior of Solid Polymers on a Metal Surface at Processing Conditions, C. I. Chung, W. J. Hennessey, and M. H. Tusim, *January, p. 9*

The Role of Polymers in Optimizing Therapeutic Effectiveness of Drugs, H. Leeper and H. Benson, *January, p. 42*

Techniques for Compounding Glass Fiber-Reinforced Thermoplastics, K. Stade, *January, p. 50*

The Evaluation of Internal Cracking in Polyurethane Adhesives, F. Swanson, *February, p. 122*

The Effect of Orientation on the Mechanical Properties of Injection Molded Polystyrene, L. Hoare and D. Hull, *March, p. 204*

Graft Copolymers of Polysaccharides with Thermoplastic Polymers. A New Type of Filled Plastic, E. B. Bagley, G. F. Fanta, R. C. Burr, W. M. Doane, and C. R. Russell, *May, p. 311*

Polyketones and Polysulfones for Conservation of Ethylene Polymers, M. Steinberg, *May, p. 335*

The Synthesis, Characterization, Evaluation, and Processing of Selected Cyclo-Olefin Sulfone Copolymers as Electron Beam Resists, R. J. Himics, M. Kaplan, N. V. Desai, and E. S. Poliniak, *June, p. 406*

A Study of the Effect of Pressure, Time, and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

Evaluation of Processing Factors on Turning of Thermoplastics, P. K. Roy and S. K. Basu, *October, p. 751*

Pressure-Specific Volume-Temperature Behavior of Thermoplastic Polymers Under Normal Processing Conditions, G. Menges and P. Thienel, *October, p. 758*

Correlation of Low Density Polyethylene Rheological Measurements with Optical and Processing Properties, M. Shida, R. N. Shroff, and L. V. Cancio, *November, p. 769*

A Study of the Flow Properties of Rubbers Using Rheometrics Mechanical Spectrometer, D. P. Mukherjee, *November, p. 788*

Thermal Load in the Processing of Thermoplastics, J. F. Ingen Housz, *December, p. 828*

Conductive Polymeric Compositions, D. M. Bigg, *December, p. 842*

211. Protein

Effect of Concentration on Apparent Viscosity of a Globular Protein Solution, P. Pradipasena and C. Rha, *December, p. 861*

R

212. Recycling

Reuse of Plastics from Solid Wastes, A. Ram, M. Narkis, and J. Kost, *April, p. 274*

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly(vinyl chloride) and Chlorinated Polyethylene as Models for Polyethylene Recycle Qualities, A. Holmström and E. M. Sörvik, *September, p. 700*

213. Reflectance

Influence of Composite Film Structure on Reflectance of Vacuum Metallized Plastics, D. W. Hoffman and R. A. Dickie, *December, p. 865*

214. Refractive Index

Interfacial (Polymer-Substrate) Failure of Ultraviolet Radiation Curable Coatings, V. D. McGinniss and A. Kah, *July, p. 478*

215. Reinforced Plastics

Techniques for Compounding Glass Fiber-Reinforced Thermoplastics, K. Stade, *January, p. 50*

Flexural Fatigue of Unidirectional Fiberglass-Reinforced Polyester, D. G. Fesko, *April, p. 242*

Effects of Coupling Agents on the Mechanical and Rheological Properties of Mica-Reinforced Polypropylene, M. S. Boaira, and C. E. Chaffey, *October, p. 715*

Swelling and Hygroelasticity of Polymeric Composites, G. Marom, *November, p. 799*

216. Reinforcing Agents

Azidosilane Polymer—Filler Coupling Agent, G. A. McFarren, T. F. Sanderson, and F. G. Schappell, *January, p. 46*

Acrylic Resin Reinforcement of Reconstituted Collagen Films, E. W. Chapman and F. Rodriguez, *May, p. 282*

Effects of Coupling Agents on the Mechanical and Rheological Properties of Mica-Reinforced Polypropylene, M. S. Boaira and C. E. Chaffey, *October, p. 715*

217. Rheological Properties

Effect of Center Block Structure on the Physical and Rheological Properties of ABA Block Copolymers. Part II. Rheological Properties, S. Futamura and E. A. Meinecke, *August, p. 562*

Glass Bead-Filled Polypropylene Part I. Rheological and Mechanical Properties, D. L. Faulkner and L. R. Schmidt, *September, p. 657*

Effects of Coupling Agents on the Mechanical and Rheological Properties of Mica-Reinforced Polypropylene, M. S. Boaira and C. E. Chaffey, *October, p. 715*

Rheology and Wire Coating of High Atomic Number Metal-Low Density Polyethylene Composites, D. M. Bigg, *October, p. 745*

Pressure-Specific Volume-Temperature Behavior of Thermoplastic Polymers Under Normal Processing Conditions, G. Menges and P. Thienel, *October, p. 758*

Correlation of Low Density Polyethylene Rheological Measurements with Optical and Processing Properties, M. Shida, R. N. Shroff, and L. V. Cancio, *November, p. 769*

A Study of the Flow Properties of Rubbers Using Rheometrics Mechanical Spectrometer, D. P. Mukherjee, *November, p. 788*

218. Rheology

The Rheology of Suspensions of Titanate Fibers in Polymer Solution, S. Onogi, Y. Mikami, and T. Matsumoto, *January, p. 1*

Effect of Center Block Structure on the Physical and Rheological Properties of ABA Block Copolymers, Part II. Rheological Properties, S. Futamura and E. A. Meinecke, *August, p. 562*

Thermodynamics of Plasticized Triblock Copolymers. Part II. Model Verification by Light Transmittance and Rheology, E. R. Pico and M. C. Williams, *August, p. 573*

Rheology and Wire Coating of High Atomic Number Metal-Low Density Polyethylene Composites, D. M. Bigg, *October, p. 745*

219. Rubber

Rubber Heat Engines, Analyses and Theory, R. J. Farris, *October, p. 737*

A Study of the Flow Properties of Rubbers Using Rheometrics Mechanical Spectrometer, D. P. Mukherjee, *November, p. 788*

S

220. Safety

The Role of Polymers in Optimizing Therapeutic Effectiveness of Drugs, H. Leeper and H. Benson, *January, p. 42*

221. Screw Design

Techniques for Compounding Glass Fiber-Reinforced Thermoplastics, K. Stade, *January, p. 50*

222. Sensitivity

The Effect of Polymer Host on Volume Phase Holographic Recording Properties, A. Bloom, R. A. Bartolini, and P. L. K. Hung, *June, p. 356*

New Photoresists of Cyclized Butadiene Polymers, Y. Harita, M. Ichikawa, K. Harada, and T. Tsunoda, *June, p. 372*

Theoretical Considerations on the Sensitivities of Electron Beam Resists, M. Tsuda, S. Oikawa, and A. Suzuki, *June, p. 390*

Parameters Affecting the Sensitivity of Poly(methyl methacrylate) as a Positive Lithographic Resist, E. Gipstein, A. C. Ouano, D. E. Johnson, and O. U. Need, III, *June, p. 396*

Studies of Methyl Methacrylate-Methyl α-Chloroacrylate Copolymers and Poly (Methyl α-Chloroacrylate) as Electron Sensitive Positive Resists, J. H. Lai, L. T. Shepherd, R. Ulmer, and C. Griep, *June, p. 402*

The Synthesis, Characterization, Evaluation, and Processing of Selected Cyclo-Olefin Sulfone Copolymers as Electron Beam Resists, R. J. Himics, M. Kaplan, N. V. Desai, and E. S. Poliniak, *June, p. 406*

Thermally-Reacted Poly(methacrylamide) as a Positive Electron Beam Resist, S. Matsuda, S. Tsuchiya, M. Honma, K. Hasegawa, G. Nagamatsu, and T. Asano, *June, p. 410*

Sensitive Chlorine-Containing Resists for X-Ray Lithography, G. N. Taylor, G. A. Coquin, and S. Somekh, *June, p. 420*

223. Sensitizers

The Examination of Poly(5-Hexene-2-One Sulfone) as a Positive-Working Photoresist, R. J. Himics and D. L. Ross, *June, p. 350*

224. Shear

The Rheology of Suspensions of Titanate Fibers in Polymer Solution, S. Onogi, Y. Mikami, and T. Matsumoto, *January, p. 1*

Deformation, Yield and Fracture of Polymers at High Pressure, J. A. Sauer, *March, p. 150*

Physical Aging in Plastics and Other Glassy Materials, L. C. E. Struik, *March, p. 165*

Plastic Flow in Glassy Polymers, A. S. Argon and M. I. Bessonov, *March, p. 174*

Wall Slip and Its Implications in the Design of Single Screw Melt-Fed Extruders, R. A. Worth and J. Parnaby, *April, p. 257*

Miscibility of Poly(Vinyl Chloride) with Ethylene and Ethyl Acrylate-Carbon Monoxide Terpolymers, L. M. Robeson and J. E. McGrath, *May, p. 300*

Adhesion at Polypropylene—Cellophane Interfaces, A. Bialski, R. St. J. Manley, and H. P. Schreiber, *July, p. 456*

Effect of Center Block Structure on the Physical and Rheological Properties of ABA Block Copolymers. Part II. Rheological Properties, S. Futamura and E. A. Meinecke, *August, p. 562*

Domain-Boundary Structure of Styrene-Isoprene Block Copolymer Films Cast from Solutions. III. Preliminary Results on Spherical Microdomains, A. Todo, H. Uno, K. Miyoshi, T. Hashimoto, and H. Kawai, *August, p. 587*

Glass Bead-Filled Polypropylene. Part I. Rheological and Mechanical Properties, D. L. Faulkner and L. R. Schmidt, *September, p. 657*

Stratified Two-Phase Flow of Molten Polymers in Circular Dies, E. Uhland, *September, p. 671*

Injection Molding in Disk-Shaped Cavities, J. F. Stevenson, A. Galskoy, K. K. Wang, I. Chen, and D. H. Reber, *September, p. 706*

Some Comments on Post Extrusion Swelling Phenomena: Die Entrance or Die Passage, L. L. Chapoy and S. Pedersen, *October, p. 724*

On the Effect of Mechanical Energy on the Degradation of Polyethylene in the Solid State and in the Melt, A. Holmström, A. Andersson, and E. M. Sörvik, *October, p. 728*

Rheology and Wire Coating of High Atomic Number Metal—Low Density Polyethylene Composites, D. M. Bigg, *October, p. 745*

Pressure-Specific Volume-Temperature Behavior of Thermoplastic Polymers Under Normal Processing Conditions, G. Menges and P. Thienel, *October, p. 758*

Effect of Additives on the Melt Elastic Modulus of Rigid Poly(Vinyl Chloride), R. G. Gough and I-J. Chen, *October, p. 764*

Correlation of Low Density Polyethylene Rheological Measurements with Optical and Processing Properties, M. Shida, R. N. Shroff, and L. V. Cancio, *November, p. 769*

A Study of the Flow Properties of Rubbers Using Rheometrics Mechanical Spectrometer, D. P. Mukherjee, *November, p. 788*

Viscoelastic Parameters of Characterized Branched Polyethylenes, A. Ram, *November, p. 793*

Adhesive Properties of Star-Shaped Block Copolymers, G. C. Meyer and J. M. Widmaier, *November, p. 803*

Correlations for Zero-Shear and Shear-Rate Dependent Viscosity of Polymeric Solutions, B. Chitrangad, H. R. Osmers, and S. Middleman, *November, p. 806*

Effect of Concentration of Apparent Viscosity of a Globular Protein Solution, P. Pradipasena and C. Rha, *December, p. 861*

225. Sheet

The Effect of Corona and Ozone Treatment of the Adhesion of Ink to the Surface of Polyethylene, M. Stradal and D. A. I. Goring, *January, p. 38*

Oriented Short Glass Fiber Composites. III. Structure and Mechanical Properties of Molded Sheets, L. Kacir, M. Narkis, and O. Ishai, *April, p. 234*

Structure of AB Block Copolymers with a Polypeptide Block: Effect of the Chain Conformation, A. Douy and B. Gallot, *August, p. 523*

226. Silanes

Azidosilane Polymer—Filler Coupling Agent, G. A. McFarren, T. F. Sanderson, and F. G. Schappell, *January, p. 46*

227. S I Units

Using the SI Units, F. S. Conant, *April, p. 222*

228. Soil Erosion

Nylon Matting: A Textile Structure Used for Soil and Civil Engineering Applications, D. Godehn, *May, p. 317*

Porous Fabric Membranes for Soil Stabilization and Drainage, R. R. Miano, *May, p. 320*

229. Solubility

Solubility of Supercritical Gases in Polymers—A Review, D. C. Bonner, *February, p. 65*

Parameters Affecting the Sensitivity of Poly(methyl methacrylate) as a Positive Lithographic Resist, E. Gipstein, A. C. Ouano, D. E. Johnson, and O. U. Need, III, *June, p. 396*

Diffusion and Solution of Gases and Vapors in Styrene-Butadiene Block Copolymers, H. Odani, K. Taira, N. Nemoto, and M. Kurata, *August, p. 527*

Effect of Center Block Structure on the Physical and Rheological Properties of ABA Block Copolymers. Part II. Rheological Properties, S. Futamura and E. A. Meinecke, *August, p. 562*

ESR Studies of Polymer Transitions. IV. Spin-Probe Studies of Styrene Block Copolymers, P. L. Kumler, S. E. Keinath, and R. F. Boyer, *August, p. 613*

230. Sorption

Solubility of Supercritical Gases in Polymers—A Review, D. C. Bonner, *February, p. 65*

Permeation and Sorption in Inhomogeneous Polymer Membranes, H. L. Frisch, *February, p. 81*

Diffusion and Solution of Gases and Vapors in Styrene-Butadiene Block Copolymers, H. Odani, K. Taira, N. Nemoto, and M. Kurata, *August, p. 527*

231. Specific Gravity

Structural Foam Molding of Incompatible Thermoplastics, J. L. Throne, *September, p. 682*

232. Speed

Frictional Behavior of Solid Polymers on a Metal Surface at Processing Conditions, C. I. Chung, W. J. Hennessey, and M. H. Tusim, *January, p. 9*

233. Squeeze Flow

Melt Characterization of Ultra High Molecular Weight Polyethylene Using Squeeze Flow, M. T. Shaw, *April, p. 266*

234. Stabilization

Light Stabilization of Flame Retardant Impact Polystyrene, R. Bradley, J. Farber, and L. Testa, *November, p. 782*

235. Stabilizers

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly(Vinyl Chloride) and Chlorinated Polyethylene as Models for Polyethylene Recycle Qualities, A. Holmström and E. M. Sörvik, *September, p. 700*

Effect of Additives on the Melt Elastic Modulus of Rigid Poly(Vinyl Chloride), R. G. Gough and I-J. Chen, *October, p. 764*

Light Stabilization of Flame Retardant Impact Polystyrene, R. Bradley, J. Farber, and L. Testa, *November, p. 782*

236. Static Properties

Flexural Fatigue of Unidirectional Fiberglass—Reinforced Polyester, D. G. Fesko, *April, p. 242*

237. Statistical Design

Effect of Additives on the Melt Elastic Modulus of Rigid Poly(Vinyl Chloride), R. G. Gough and I-J. Chen, *October, p. 764*

238. Steam

Predicting the Service Life of Polysulfone in Steam or Hot Water, R. K. Dearing, *December, p. 832*

239. Stereochemistry

Parameters Affecting the Sensitivity of Poly(methyl methacrylate) as a Positive Lithographic Resist, E. Gipstein, A. C. Ouano, D. E. Johnson, and O. U. Need, III, *June, p. 396*

240. Strength

Powder Processing of Ultra-High Molecular Weight Polyethylene I. Powder Characterization and Compaction, G. W. Halldin and I. L. Kamel, *January, p. 21*

Strength of Elastomers—A Perspective, T. L. Smith, *March, p. 129*

Effects of Orientation and Chemical Structure on the Strength Properties of Some Polymers, M. Takano and L. E. Nielsen, *April, p. 229*

Flexural Fatigue of Unidirectional Fiberglass–Reinforced Polyester, D. G. Fesko, *April, p. 242*

Acrylic Resin Reinforcement of Reconstituted Collagen Films, E. W. Chapman and F. Rodriguez, *May, p. 282*

Degradation Action of Water on S-Glass (Abstract only.), A. C. T. Hsu, W. A. Jemian, and R. C. Wilcox, *May, p. 340*

The Role of the Interface in Adhesion Phenomena, K. L. Mittal, *July, p. 467*

241. Stress-Strain

The Rheology of Suspensions of Titanate Fibers in Polymer Solution, S. Onogi, Y. Mikami, and T. Matsumoto, *January, p. 1*

The Role of Intercrystalline Links in the Environmental Stress Cracking of High Density Polyethylene, P. D. Frayer, P. P. Tong, and W. W. Dreher, *January, p. 27*

Chemorheological Changes in Crosslinked Epoxy Resins Subjected to Large Strains, D. Katz and A. Buchman, *February, p. 85*

The Deep Drawing of Thermoplastics, M. J. Miles and N. J. Mills, *February, p. 101*

Strength of Elastomers—A Perspective, T. L. Smith, *March, p. 129*

Deformation, Yield and Fracture of Polymers at High Pressure, J. A. Sauer, *March, p. 150*

Physical Aging in Plastics and Other Glassy Materials, L. C. E. Struik, *March, p. 165*

Plastic Flow in Glassy Polymers, A. S. Argon and M. I. Bessonov, *March, p. 174*

Fatigue Crack Propagation in Poly(Methyl Methacrylate): Effect of Molecular Weight and Internal Plasticization, S. L. Kim, M. Skibo, J. A Manson, and R. W. Hertzberg, *March, p. 194*

The Effect of Orientation on the Mechanical Properties of Injection Molded Polystyrene, L. Hoare and D. Hull, *March, p. 204*

Mechanical Properties of Mixtures of Two Compatible Polymers, A. F. Yee, *March, p. 213*

Effects of Orientation and Chemical Structure on the Strength Properties of Some Polymers, M. Takano and L. E. Nielsen, *April, p. 229*

Influence of Molecular Weight on Fatigue Behavior of Polyethylene and Polystyrene, J. A. Sauer, E. Foden, and D. R. Morrow, *April, p. 246*

Castor Oil Based Interpenetrating Polymer Networks IV. Mechanical Behavior, G. M. Yenwo, L. H. Sperling, J. Pulido, and J. A. Manson, *April, p. 251*

Castor Oil Based Interpenetrating Polymer Networks. II. Synthesis and Properties of Emulsion Polymerized Products, N. Devia-Manjarres, G. Yenwo, J. Pulido, J. A. Manson, A. Coupe, and L. H. Sperling, *May, p. 294*

Polymer-Impregnated Mortars. I. Effect of Polymer State on Mechanical Behavior, Y.-N. Liu, J. A. Manson, W. F. Chen, and J. W. Vanderhoff, *May, p. 325*

Interfacial Phenomena between Brittle and Polymeric Films, T. S. Chow, R. C. Penwell, and C. A. Liu, *July, p. 436*

Peel Mechanics of Adhesive Joints, A. N. Gent and G. R. Hamed, *July, p. 462*

Structure and Properties of Microcomposites and Macrocomposites from Block Polymers, S. L. Aggarwal and R. A. Livigni, *August, p. 498*

Structural and Mechanical Properties of an S-B-S Copolymer, J. A. Odell and A. Keller, *August, p. 544*

Viscoelastic Properties of Homogeneous Block Copolymers, M. Shen, D. Soong, and D. R. Hansen, *August, p. 560*

Unit Cell Deformation under Elongational Stress of Oriented SIS Three-Block Copolymers, A. Mathis, G. Hadziioannou, and A. Skoulious, *August, p. 570*

Glass Bead-Filled Polypropylene. Part I. Rheological and Mechanical Properties, D. L. Faulkner and L. R. Schmidt, *September, p. 657*

Some Comments on Post Extrusion Swelling Phenomena: Die Entrance or Die Passage, L. L. Chapoy and S. Pedersen, *October, p. 724*

Charpy Tests on Brittle Polymers, A. G. M. Tak, *October, p. 733*

Rubber Heat Engines, Analyses and Theory, R. J. Farris, *October, p. 737*

Viscoelastic Parameters of Characterized Branched Polyethylenes, A. Ram, *November, p. 793*

Predicting the Service Life of Polysulfone in Steam or Hot Water, R. K. Dearing, *December, p. 832*

Effect of Cross-Linking on Hydrostatic Creep of Epoxy, W. N. Findley and R. M. Reed, *December, p. 837*

Stress Cracking of Plastics by Gasoline and Gasoline Components, M. G. Wyzgoski and C. H. M. Jacques, *December, p. 854*

Effect of Concentration on Apparent Viscosity of a Globular Protein Solution, P. Pradipasena and C. Rha, *December, p. 861*

Craze and Creep Resistance of High-Impact Polystyrene in Alcohols, D. McCammond and V. S. Hoa, *December, p. 869*

242. Stretching

Effects of Orientation and Chemical Structure on the Strength Properties of Some Polymers, M. Takano and L. E. Nielsen, *April, p. 229*

243. Structural Properties

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly(Vinyl Chloride) and Chlorinated Polyethylene as Models for Polyethylene Recycle Qualities, A. Holmström and E. M. Sörvik, *September, p. 700*

244. Structure

The Rheology of Suspensions of Titanate Fibers in Polymer Solution, S. Onogi, Y. Mikami, and T. Matsumoto, *January, p. 1*

Plastic Deformation of Crystalline Polymers, A. Peterlin, *March, p. 183*

Effects of Orientation and Chemical Structure on the Strength Properties of Some Polymers, M. Takano and L. E. Nielsen, *April, p. 229*

Oriented Short Glass Fiber Composites. III. Structure and Mechanical Properties of Molded Sheets, L. Kacir, M. Narkis, and O. Ishai, *April, p. 234*

Effect of Olefin Structure on the Vapor-Development of Poly (Olefin Sulfones) Under Electron Irradiation, M. J. Bowden and L. F. Thompson, *April, p. 269*

The Effect of Polymer Host on Volume Phase Holographic Recording Properties, A. Bloom, R. A. Bartolini, and P. L. K. Hung, *June, p 356*

Structure and Properties of Microcomposites and Macrocomposites from Block Polymers, S. L. Aggarwal and R. A. Livigni, *August, p. 498*

Morphology and Organizational Characteristics of Poly(m-Phenylene Isophthalamide-b-Ethylene Oxide) Systems, J. F. Fellers, Y.-D. Lee, R. J. Zdrahala, and S. C. Horne, *August, p. 506*

Structure of AB Block Copolymers with a Polypeptide Block: Effect of the Chain Conformation, A. Douy and B. Gallot, *August, p. 523*

Structural and Mechanical Properties of an S-B-S Copolymer, J. A. Odell and A. Keller, *August, p. 544*

Effect of Center Block Structure on the Physical and Rheological Properties of ABA Block Copolymers. Part II. Rheological Properties, S. Futamura and E. A. Meinecke, *August, p. 562*

Statistical Thermodynamics of Microdomain Structures in Block Copolymer Systems, E. Helfand and Z. Wasserman, *August, p. 582*

Domain-Boundary Structure of Styrene-Isoprene Block Copolymer Films Cast from Solutions. III. Preliminary Results on Spherical Microdomains, A. Todo, H. Uno, K. Miyoshi, T. Hashimoto, and H. Kawai, *August, p. 587*

The Influence of Diblock Copolymers on the Structure and Properties of Polybutadiene-Polyisoprene Blends, A. R. Ramos and R. E. Cohen, *August, p. 639*

Thermal Treatment of Cold-Formed Poly(vinyl chloride), T. E. Brady and S. A. Jabarin, *September, p. 686*

245. Styrene-Acrylonitrile

Effects of Orientation and Chemical Structure on the Strength Properties of Some Polymers, M. Takano and L. E. Nielsen, *April, p. 229*

246. Styrene-Butadiene

Structure and Properties of Microcomposites and Macrocomposites from Block Polymers, S. L. Aggarwal and R. A. Livigni, *August, p. 498*

Diffusion and Solution of Gases and Vapors in Styrene-Butadiene Block Copolymers, H. Odani, K. Taira, N. Nemoto, and M. Kurata, *August, p. 527*

247. Styrene-Butadiene-Styrene

Linear Dynamic Mechanical Properties of An SBS Block Copolymer, E. V. Gouinlock and R. S. Porter, *August, p. 535*

Structural and Mechanical Properties of an S-B-S Copolymer, J. A. Odell and A. Keller, *August, p. 544*

Thermodynamics of Plasticized Triblock Copolymers. Part II. Model Verification by Light Transmittance and Rheology, E. R. Pico and M. C. Williams, *August, p. 573*

Pulsed Nuclear Magnetic Resonance for Studying Phase Separation in Block and Segmented Copolymers, R. A. Assink and G. L. Wilkes, *August, p. 606*

Micelle Formation by Butadiene-Styrene Block Polymers in *n*-Alkanes, C. J. Stacy and G. Kraus, *August, p. 627*

248. Sulfur Dioxide

Olefin-SO_2 Copolymers as Biomaterials, D. N. Gray, *October, p. 719*

249. Surface Properties

Limiting Surface Tension by Gas Chromatography, J.-M. Braun and J. E. Guillet, *July, p. 434*

Oligomeric Fluorinated Additives as Surface Modifiers for Solid Polymers, M. K. Bernett, *July, p. 450*

Adhesion Effects and Performance of Mass Transfer Equipment Using Teflon Surfaces, A. B. Ponter, *July, p. 484*

Morphology and Properties of Crystalline Polyester-Siloxane Block Copolymers, J. J. O'Malley and W. J. Stauffer, *August, p. 510*

250. Swelling

Three Dimensional Behavior of Negative Electron Resists, R. D. Heidenreich and G. W. Kammlott, *June, p. 377*

Some Comments on Post Extrusion Swelling Phenomena: Die Entrance or Die Passage, L. L. Chapoy and S. Pedersen, *October, p. 724*

Swelling and Hygroelasticity of Polymeric Composites, G. Marom, *November, p. 799*

251. Synthesis

Castor Oil Based Interpenetrating Polymer Networks. II. Synthesis and Properties of Emulsion Polymerized Products, N. Devia-Manjarres, G. Yenwo, J. Pulido, J. A. Manson, A. Coupe, and L. H. Sperling, *May, p. 294*

Polyketones and Polysulfones for Conservation of Ethylene Polymers, M. Steinberg, *May, p. 335*

The Examination of Poly(5-Hexene-2-One Sulfone) as a Positive-Working Photoresist, R. J. Himics and D. L. Ross, *June, p. 350*

New Photoresists of Cyclized Butadiene Polymers, Y. Harita, M. Ichikawa, K. Harada, and T. Tsunoda, *June, p. 372*

The Synthesis, Characterization, Evaluation, and Processing of Selected Cyclo-Olefin Sulfone Copolymers as Electron Beam Resists, R. J. Himics, M. Kaplan, N. V. Desai, and E. S. Poliniak, *June, p. 406*

New Block Copolymers of α-Amino Acids, F. Uralil, T. Hayaski, J. M. Anderson, and A. Hiltner, *August, p. 515*

Bisphenol-A-Polycarbonate-Bisphenol-A-Polysulfone Block Copolymers, J. E. McGrath, T. C. Ward, E. Shchori, and A. J. Wnuk, *August, p. 647*

Olefin-SO_2 Copolymers as Biomaterials, D. N. Gray, *October, p. 719*

Cobalticenium-Bridged Polybenzazoles. Part II. High Temperature Solution Polymerization in Ethylated Polyphosphoric Acid, E. W. Neuse and G. Horlbeck, *December, p. 821*

Conductive Polymeric Compositions, D. M. Bigg, *December, p. 842*

T

252. Temperature Dependence

Frictional Behavior of Solid Polymers on a Metal Surface at Processing Conditions, C. I. Chung, W. J. Hennessey, and M. H. Tusim, *January, p. 9*

Techniques for Compounding Glass Fiber-Reinforced Thermoplastics, K. Stade, *January, p. 50*

Transition Behavior and Phase Segregation in TDI Polyurethanes, N. S. Schneider and C. S. Paik Sung, *February, p. 73*

Chemorheological Changes in Crosslinked Epoxy Resins Subjected to Large Strains, D. Katz and A. Buchman, *February, p. 85*

Strength of Elastomers—A Perspective, T. L. Smith, *March, p. 129*

Fracture Mechanics of Polymers, J. G. Williams, *March, p. 144*

Physical Aging in Plastics and Other Glassy Materials, L. C. E. Struik, *March, p. 165*

Effect of Olefin Structure on the Vapor-Development of Poly (Olefin Sulfones) Under Electron Irradiation, M. J. Bowden and L. F. Thompson, *April, p. 269*

Miscibility of Poly(Vinyl Chloride) with Ethylene and Ethyl Acrylate-Carbon Monoxide Terpolymer, L. M. Robeson and J. E. McGrath, *May, p. 300*

Graft Copolymers of Polysaccharides with Thermoplastic Polymers. A New Type of Filled Plastic, E. B. Bagley, G. F. Fanta, R. C. Burr, W. M. Doane, and C. R. Russell, *May, p. 311*

Polymer-Impregnated Mortars. I. Effect of Polymer State on Mechanical Behavior, Y.-N. Liu, J. A. Manson, W. F. Chen, and J. W. Vanderhoff, *May, p. 325*

Properties and Applications of a Pitch Carbon Microsphere Composite, H. L. Price and J. B. Nelson, *May, p. 341*

Surface Modification of Polymers and Practical Adhesion, H. Schonhorn, H. L. Frisch, and G. L. Gaines, Jr., *July, p. 440*

Adhesion at Polypropylene—Cellophane Interfaces, A. Bialski, R. St. J. Manley, and H. P. Schreiber, *July, p. 456*

Morphology and Properties of Crystalline Polyester-Siloxane Block Copolymers, J. J. O'Malley and W. J. Stauffer, *August, p. 510*

New Block Copolymers of α-Amino Acids, F. Uralil, T. Hayashi, J. M. Anderson, and A. Hiltner, *August, p. 515*

Linear Dynamic Mechanical Properties of An SBS Block Copolymer, E. V. Gouinlock and R. S. Porter, *August, p. 535*

Viscoelastic Properties of Homogeneous Block Copolymers, M. Shen, D. Soong, and D. R. Hansen, *August, p. 560*

Effect of Center Block Structure on the Physical and Rheological Properties of ABA Block Copolymers. Part II. Rheological Properties, S. Futamura nd E. A. Meinecke, *August, p. 562*

Thermodynamics of Plasticized Triblock Copolymers. Part II. Model Verification by Light Transmittance and Rheology, E. R. Pico and M. C. Williams, *August, p. 573*

Domain-Boundary Structure of Styrene-Isoprene Block Copolymer Films Cast from Solutions. III. Preliminary Results on Spherical Microdomains, A. Todo, H. Uno, K. Miyoshi, T. Hashimoto, and H. Kawai, *August, p. 587*

Pulsed Nuclear Magnetic Resonance for Studying Phase Separation in Block and

Segmented Copolymers, R. A. Assink and G. L. Wilkes, *August, p. 606*

ESR Studies of Polymer Transitions. IV. Spin-Probe Studies of Styrene Block Copolymers, P. L. Kumler, S. E. Keinath, and R. F. Boyer, *August, p. 613*

Micelle Formation by Butadiene-Styrene Block Polymers in *n*-Alkanes, C. J. Stacy and G. Kraus, *August, p. 627*

The Influence of Diblock Copolymers on the Structure and Properties of Polybutadiene-Polyisoprene Blends, A. R. Ramos and R. E. Cohen, *August, p. 639*

Bisphenol-A-Polycarbonate-Bisphenol-A-Polysulfone Block Copolymers, J. E. McGrath, T. C. Ward, E. Shchori, and A. J. Wnuk, *August, p. 647*

Chlorosulfonated Block Copolymers, C. E. Rogers and M. J. Covitch, *August, p. 652*

Stratified Two-Phase Flow of Molten Polymers in Circular Dies, E. Uhland, *September, p. 671*

Thermal Treatment of Cold-Formed Poly(vinyl chloride), T. E. Brady and S. A. Jabarin, *September, p. 686*

A Study of the Effect of Pressure, Time, and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

Injection Molding in Disk-Shaped Cavities, J. F. Stevenson, A. Galskoy, K. K. Wang, I. Chen and D. H. Reber, *September, p. 706*

Transitions in Polymer Melts, L. E. Nielsen, *October, p. 713*

Olefin-SO_2 Copolymers as Biomaterials, D. N. Gray, *October, p. 719*

On the Effect of Mechanical Energy on the Degradation of Polyethylene in the Solid State and in the Melt, A. Holmström, A. Andersson, and E. M. Sörvik, *October, p. 728*

Rubber Heat Engines, Analyses and Theory, R. J. Farris, *October, p. 737*

Effect of Additives on the Melt Elastic Modulus of Rigid Poly(Vinyl Chloride), R. G. Gough and I- J. Chen, *October, p. 764*

Viscoelastic Parameters of Characterized Branched Polyethylenes, A. Ram, *November, p. 793*

Flow and Heat Transfer in the Nozzle of an Injection Molding Machine, R. E. Nunn and R. T. Fenner, *November, p. 811*

Thermal Load in the Processing of Thermoplastics, J. F. Ingen Housz, *December, p. 828*

Predicting the Service Life of Polysulfone in Steam or Hot Water, R. K. Dearing, *December, p. 832*

253. *Tensile Properties*

The Role of Intercrystalline Links in the Environmental Stress Cracking of High Density Polyethylene, P. D. Frayer, P. P. Tong, and W. W. Dreher, *January, p. 27*

Azidosilane Polymer—Filler Coupling Agent, G. A. McFarren, T. F. Sanderson, and F. G. Schappell, *January, p. 46*

Distribution of Some Physical Properties in Injection-Molded Thermoplastic Parts, Z. Bakerdjian and M. R. Kamal, *February, p. 96*

Strength of Elastomers—A Perspective, T. L. Smith, *March, p. 129*

Deformation, Yield and Fracture of Polymers at High Pressure, J. A. Sauer, *March, p. 150*

Plastic Flow in Glassy Polymers, A. S. Argon and M. I. Bessonov, *March, p. 174*

Mechanical Properties of Mixtures of Two Compatible Polymers, A. F. Yee, *March, p. 213*

Effects of Orientation and Chemical Structure on the Strength Properties of Some Polymers, M. Takano and L. E. Nielsen, *April, p. 229*

Oriented Short Glass Fiber Composites. III. Structure and Mechanical Properties of Molded Sheets, L. Kacir, M. Narkis, and O. Ishai, *April, p. 234*

Castor Oil Based Interpenetrating Polymer Networks IV. Mechanical Behavior, G. M. Yenwo, L. H. Sperling, J. Pulido, and J. A. Manson, *April, p. 251*

Reuse of Plastics from Solid Wastes, A. Ram, M. Narkis, and J. Kost, *April, p. 274*

Acrylic Resin Reinforcement of Reconstituted Collagen Films, E. W. Chapman and F. Rodriguez, *May, p. 282*

Crosslinking Systems in the Graft Polymerization of Chromium-Tanned Collagen, E. H. Harris and S. H. Feairheller, *May, p. 287*

Low Cost Polyolefin Composites Containing Pulp Mill Wood Residue, G. R. Lightsey, P. H. Short, and V. K. K. Sinha, *May, p. 305*

Polymer-Impregnated Mortars. I. Effect of Polymer State on Mechanical Behavior, Y.-N. Liu, J. A. Manson, W. F. Chen, and J. W. Vanderhoff, *May, p. 325*

Adhesion at Polypropylene—Cellophane Interfaces, A. Bialski, R. St. J. Manley, and H. P. Schreiber, *July, p. 456*

The Role of the Interface in Adhesion Phenomena, K. L. Mittal, *July, p. 467*

Glass Bead-Filled Polypropylene. Part I. Rheological and Mechanical Properties, D. L. Faulkner and L. R. Schmidt, *September, p. 657*

Structural Foam Molding of Incompatible Thermoplastics, J. L. Throne, *September, p. 682*

Olefin-SO_2 Copolymers as Biomaterials, D. N. Gray, *October, p. 719*

Adhesive Properties of Star-Shaped Block Copolymers, G. C. Meyer and J. M. Widmaier, *November, p. 803*

Predicting the Service Life of Polysulfone in Steam or Hot Water, R. K. Dearing, *December, p. 832*

254. *Terpolymers*

Miscibility of Poly(Vinyl Chloride) with Ethylene and Ethyl Acrylate-Carbon Monoxide Terpolymers, L. M. Robeson and J. E. McGrath, *May, p. 300*

255. *Theoretical Model*

Frictional Behavior of Solid Polymers on a Metal Surface at Processing Conditions, C. I. Chung, W. J. Hennessey, and M. H. Tusim, *January, p. 9*

Solubility of Supercritical Gases in Polymers—A Review, D. C. Bonner, *February, p. 65*

Plastic Flow in Glassy Polymers, A. S. Argon and M. I. Bessonov, *March, p. 174*

Wall Slip and Its Implications in the Design of Single Screw Melt-Fed Extruders, R. A. Worth and J. Parnaby, *April, p. 257*

A Water-Soluble, Reciprocity-Law-Failing Photoresist, M. Akagi, S. Nonogaki, T. Kohashi, Y. Oba, M. Oikawa, and Y. Tomita, *June p. 353*

Theoretical Considerations on the Sensitivities of Electron Beam Resists, M. Tsuda, S. Oikawa and A. Suzuki, *June, p. 390*

Interfacial Phenomena between Brittle and Polymeric Films, T. S. Chow, R. C. Penwell, and C. A. Liu, *July, p. 436*

Surface Modification of Polymers and Practical Adhesion, H. Schonhorn, H. L. Frisch, and G. L. Gaines, Jr., *July, p. 440*

Interface Degradation Processes and Durability, D. H. Kaelble, *July, p. 474*

Structural and Mechanical Properties of an S-B-S Copolymer, J. A. Odell and A. Keller, *August, p. 544*

Statistical Thermodynamics of Microdomain Structures in Block Copolymer Systems, E. Helfand and Z. Wasserman, *August, p. 582*

Monte Carlo Studies of Isolated AB Block Copolymer Molecules, J. Bender and K. Solc, *August, p. 622*

Stratified Two-Phase Flow of Molten Polymers in Circular Dies, E. Uhland, *September, p. 671*

Some Comments on Post Extrusion Swelling Phenomena: Die Entrance or Die Passage, L. L. Chapoy and S. Pedersen, *October, p. 724*

Rubber Heat Engines, Analyses and Theory, R. J. Farris, *October, p. 737*

Rheology and Wire Coating of High Atomic Number Metal-Low Density Polyethylene Composites, D. M. Bigg, *October, p. 745*

Conductive Polymeric Compositions, D. M. Bigg, *December, p. 842*

256. *Theory*

Strength of Elastomers—A Perspective, T. L. Smith, *March, p. 129*

257. *Therapeutic Systems*

The Role of Polymers in Optimizing Therapeutic Effectiveness of Drugs, H. Leeper and H. Benson, *January, p. 42*

258. *Thermal Load*

Thermal Load in the Processing of Thermoplastics, J. F. Ingen Housz, *December, p. 828*

259. *Thermal Properties*

Properties and Applications of a Pitch Carbon Microsphere Composite, H. L. Price and J. B. Nelson, *May, p. 341*

Thermally-Reacted Poly(methacrylamide) as a Positive Electron Beam Resist, S. Matsuda, S. Tsuchiya, M. Honma, K. Hasegawa, G. Nagamatsu, and T. Asano, *June, p. 410*

Conductive Polymeric Compositions, D. M. Bigg, *December, p. 842*

260. Thermal Treatment

Thermal Treatment of Cold-Formed Poly(vinyl chloride), T. E. Brady and S. A. Jabarin, *September, p. 686*

261. Thermodynamic Properties

Frictional Behavior of Solid Polymers on a Metal Surface at Processing Conditions, C. I. Chung, W. J. Hennessey, and M. H. Tusim, *January, p. 9*

Thermodynamics of Plasticized Triblock Copolymers. Part II. Model Verification by Light Transmittance and Rheology, E. R. Pico and M. C. Williams, *August, p. 573*

Statistical Thermodynamics of Microdomain Structures in Block Copolymer Systems, E. Helfand and Z. Wasserman, *August, p. 582*

ESR Studies of Polymer Transitions. IV. Spin-Probe Studies of Styrene Block Copolymers, P. L. Kumler, S. E. Keinath, and R. F. Boyer, *August, p. 613*

Rubber Heat Engines, Analyses and Theory, R. J. Farris, *October, p. 737*

262. Thermoelasticity

Swelling and Hygroelasticity of Polymeric Composites, G. Marom, *November, p. 799*

263. Thermo-Oxidation

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly(Vinyl Chloride) and Chlorinated Polyethylene as Models for Polyethylene Recycle Qualities, A. Holmström and E. M. Sörvik, *September, p. 700*

264. Thermoplastics

Distribution of Some Physical Properties in Injection-Molded Thermoplastic Parts, Z. Bakerdjian and M. R. Kamal, *February, p. 96*

The Deep Drawing of Thermoplastics, M. J. Miles and N. J. Mills, *February, p. 101*

Graft Copolymers of Polysaccharides with Thermoplastic Polymers. A New Type of Filled Plastic, E. B. Bagley, G. F. Fanta, R. C. Burr, W. M. Doane, and C. R. Russell, *May, p. 311*

Evaluation of Processing Factors on Turning of Thermoplastics, P. K. Roy and S. K. Basu, *October, p. 751*

Thermal Load in the Processing of Thermoplastics, J. F. Ingen Housz, *December, p. 828*

265. Time Dependence

The Rheology of Suspensions of Titanate Fibers in Polymer Solution, S. Onogi, Y. Mikami, and T. Matsumoto, *January, p. 1*

The Role of Intercrystalline Links in the Environmental Stress Cracking of High Density Polyethylene, P. D. Frayer, P. P. Tong, and W. W. Dreher, *January, p. 27*

Strength of Elastomers—A Perspective, T. L. Smith, *March, p. 129*

Acrylic Resin Reinforcement of Reconstituted Collagen Films, E. W. Chapman and F. Rodriguez, *May, p. 282*

Adhesion at Polypropylene—Cellophane Interfaces, A. Bialski, R. St. J. Manley, and H. P. Schreiber, *July, p. 456*

Thermodynamics of Plasticized Triblock Copolymers. Part II. Model Verification by Light Transmittance and Rheology, E. R. Pico and M. C. Williams, *August, p. 573*

Pulsed Nuclear Magnetic Resonance for Studying Phase Separation in Block and Segmented Copolymers, R. A. Assink and G. L. Wilkes, *August, p. 606*

Stratified Two-Phase Flow of Molten Polymers in Circular Dies, E. Uhland, *September, p. 671*

A Study of the Effect of Pressure, Time, and Temperature on High-Pressure Powder Molding, D. M. Bigg, *September, p. 691*

Some Comments on Post Extrusion Swelling Phenomena: Die Entrance or Die Passage, L. L. Chapoy and S. Pedersen, *October, p. 724*

Effects of Post-Curing of Unsaturated Polyester Resins in Various Media, S-A. Chen and P-K. Tai, *November, p. 775*

Flow and Heat Transfer in the Nozzle of an Injection Molding Machine, R. E. Nunn and R. T. Fenner, *November, p. 811*

Thermal Load in the Processing of Thermoplastics, J. F. Ingen Housz, *December, p. 828*

Effect of Cross-Linking on Hydrostatic Creep of Epoxy, W. N. Findley and R. M. Reed, *December, p. 837*

Stress Cracking of Plastics by Gasoline and Gasoline Components, M. G. Wyzgoski and C. H. M. Jacques, *December, p. 854*

Craze and Creep Resistance of High-Impact Polystyrene in Alcohols, D. McCammond and V. S. Hoa, *December, p. 869*

266. Torque

Rubber Heat Engines, Analyses and Theory, R. J. Farris, *October, p. 737*

267. Transition Behavior

Transition Behavior and Phase Segregation in TDI Polyurethanes, N. S. Schneider and C. S. Paik Sung, *February, p. 73*

Transitions in Polymer Melts, L. E. Nielsen, *October, p. 713*

268. Turning

Evaluation of Processing Factors on Turning of Thermoplastics, P. K. Roy and S. K. Basu, *October, p. 751*

U

269. U V Absorbers

Light Stabilization of Flame Retardant Impact Polystyrene, R. Bradley, J. Farber, and L. Testa, *November, p. 782*

V

270. Vacuum Deposition

Influence of Composite Film Structure on Reflectance of Vacuum Metallized Plastics, D. W. Hoffman and R. A. Dickie, *December, p. 865*

271. Vinyl Alcohol

Effects of Orientation and Chemical Structure on the Strength Properties of Some Polymers, M. Takano and L. E. Nielsen, *April, p. 229*

272. Vinyls

Crosslinking Systems in the Graft Polymerization of Chromium-Tanned Collagen, E. H. Harris and S. H. Feairheller, *May, p. 287*

273. Viscoelasticity

Fracture Mechanics of Polymers, J. G. Williams *March, p. 144*

Linear Dynamic Mechanical Properties of An SBS Block Copolymer, E. V. Gouinlock and R. S. Porter, *August, p. 535*

Effect of Center Block Structure on the Physical and Rheological Properties of ABA Block Copolymers. Part II. Rheological Properties, S. Futamura and E. A. Meinecke, *August, p. 562*

Viscoelastic Parameters of Characterized Branched Polyethylenes, A. Ram, *November, p. 793*

274. Viscoelastic Properties

Linear Dynamic Mechanical Properties of An SBS Block Copolymer, E. V. Gouinlock and R. S. Porter, *August, p. 535*

Viscoelastic Properties of Homogeneous Block Copolymers, M. Shen, D. Soong, and D. R. Hansen, *August, p. 560*

275. Viscosity

The Rheology of Suspensions of Titanate Fibers in Polymer Solution, S. Onogi, Y. Mikami, and T. Matsumoto, *January, p. 1*

Linear Dynamic Mechanical Properties of An SBS Block Copolymer, E. V. Gouinlock and R. S. Porter, *August, p. 535*

Thermodynamics of Plasticized Triblock Copolymers. Part II. Model Verification by Light Transmittance and Rheology, E. R. Pico and M. C. Williams, *August, p. 573*

Glass Bead-Filled Polypropylene. Part I. Rheological and Mechanical Properties, D. L. Faulkner and L. R. Schmidt, *September, p. 657*

Glass Bead-Filled Polypropylene. Part II. Mold-Filling Studies during Injection Molding, L. R. Schmidt, *September, p. 666*

Stratified Two-Phase Flow of Molten Polymers in Circular Dies, E. Uhland, *September, p. 671*

Injection Molding in Disk-Shaped Cavities, J. F. Stevenson, A. Galskoy, K. K. Wang, I. Chen and D. H. Reber, *September, p. 706*

Transitions in Polymer Melts, L. E. Nielsen, *October, p. 713*

On the Effect of Mechanical Energy on the Degradation of Polyethylene in the Solid State and in the Melt, A. Holmström, A. Andersson, and E. M. Sörvik, *October, p. 728*

Rheology and Wire Coating of High Atomic Number Metal-Low Density Polyethylene Composites, D. M. Bigg, *October, p. 745*

Pressure-Specific Volume-Temperature Behavior of Thermoplastic Polymers Under Normal Processing Conditions, G. Menges and P. Thienel, *October, p. 758*

Correlation of Low Density Polyethylene Rheological Measurements with Optical and Processing Properties, M. Shida, R. N. Shroff, and L. V. Cancio, *November, p.769*

A Study of the Flow Properties of Rubbers Using Rheometrics Mechanical Spectrometer, D. P. Mukherjee, *November, p. 788*

Correlations for Zero-Shear and Shear-Rate Dependent Viscosity of Polymeric Solutions, B. Chitrangad, H. R. Osmers, and S. Middleman, *November, p. 806*

Experimental Characterization of the Alignment of Short Fibers During Flow, K. N. Murty and G. F. Modlen, *December, p. 848*

Effect of Concentration on Apparent Viscosity of a Globular Protein Solution, P. Pradipasena and C. Rha, *December, p. 861*

W-X-Y

276. *Wall Slip*

Wall Slip and Its Implications in the Design of Single Screw Melt-Fed Extruder, R. A. Worth and J. Parnaby, *April, p. 257*

277. *Waste*

Polymeric Adsorbents for Treatment of Waste Effluents, R. Kunin, *January, p. 58*

Reuse of Plastics from Solid Wastes, A. Ram, M. Narkis, and J. Kost, *April, p. 274*

Thermo-Oxidative Degradation of Polyethylene. IV. Blends Containing Poly(Vinyl Chloride) and Chlorinated Polyethylene as Models for Polyethylene Recycle Qualities, A. Holmström and E. M. Sörvik, *September, p. 700*

278. *Water*

Degradation Action of Water on S-Glass (Abstract only.), A. C. T. Hsu, W. A. Jemian and R. C. Wilcox, *May, p. 340*

279. *Wettability*

Oligomeric Fluorinated Additives as Surface Modifiers for Solid Polymers, M. K. Bernett, *July, p. 450*

The Role of the Interface in Adhesion Phenomena, K. L. Mittal, *July, p. 467*

Adhesion Effects and Performance of Mass Transfer Equipment Using Teflon Surfaces, A. B. Ponter, *July, p. 484*

Morphology and Properties of Crystalline Polyester-Siloxane Block Copolymers, J. J. O'Malley and W. J. Stauffer, *August, p. 510*

280. *Wire Coating*

Rheology and Wire Coating of High Atomic Number Metal-Low Density Polyethylene Composites, D. M. Bigg, *October, p. 745*

281. *Wood Residue*

Low Cost Polyolefin Composites Containing Pulp Mill Wood Residue, G. R. Lightsey, P. H. Short, and V. K. K. Sinha, *May, p. 305*

282. *X-Ray Lithography*

X-Ray Lithography, R. Feder, E. Spiller, and J. Topalian, *June, p. 385*

Theoretical Considerations on the Sensitivities of Electron Beam Resists, M. Tsuda, S. Oikawa, and A. Suzuki, *June, p. 390*

283. *X-Ray Scattering*

Small Angle X-Ray Scattering from Block Polymers. II. The Bulk State, A. D. Le Grand, G. G. Vitale, and D. G. LeGrand, *August, p. 598*

284. *Yield*

Deformation, Yield and Fracture of Polymers at High Pressure, J. A. Sauer, *March, p. 150*

Structural and Mechanical Properties of an S-B-S Copolymer, J. A. Odell and A. Keller, *August, p. 544*

AUTHORS' INDEX

Numbers refer to category headings under "Subject and Title Index," i.e., 197 see "Polypropylene."

A

Aggarwal, S. L. 19, 20, 37, 53, 98, 106, 145, 163, 241, 244, 246
Agnihotri, R. K. 33, 120, 128, 133, 172, 183
Akagi, M. 49, 52, 128, 159, 161, 255
Anderson, J. M. 13, 20, 126, 145, 195, 251, 252
Andersson, A. 22, 28, 72, 110, 143, 181, 224, 252, 275
Argon, A.S. 53, 86, 98, 128, 141, 152, 163, 182, 191, 196, 199, 224, 241, 253, 255
Asano, T. 54, 69, 83, 120, 190, 222, 259
Assink, R. A. 20, 50, 158, 180, 202, 247, 252, 265

B

Bagley, E. B. 44, 79, 82, 198, 210, 252, 264
Bakerdjian, Z. 17, 55, 101, 110, 163, 181, 199, 253, 264
Bartolini, R. A. 75, 103, 104, 128, 180, 222, 244
Basu, S. K. 122, 148, 201, 210, 264, 268
Bendler, J. 20, 150, 255
Benson, H. 156, 188, 210, 220, 257
Bernett, M. K. 4, 5, 57, 83, 191, 199, 205, 249, 279
Bessonov, M. I. 53, 86, 98, 128, 141, 152, 163, 182, 191, 196, 199, 224, 241, 253, 255
Bialski, A. 5, 25, 43, 50, 145, 197, 224, 252, 253, 265
Bigg, D. M. 4, 23, 37, 67, 68, 81, 82, 129, 134, 169, 172, 176, 181, 191, 196, 197, 200, 201, 204, 207, 208, 209, 210, 217, 218, 224, 251, 252, 255, 259, 265, 275, 280
Bloom, A. 75, 103, 104, 128, 180, 222, 244
Boaira, M.S. 4, 37, 46, 85, 127, 197, 215, 216, 217
Bonner, D. C. 93, 181, 184, 191, 197, 199, 229, 230, 255
Bowden, M.J. 114, 115, 193, 200, 244, 252
Boyer, R. F. 20, 28, 175, 178, 199, 229, 252, 261
Bradley, R. 4, 84, 118, 199, 234, 235, 269
Brady, T. E. 17, 150, 163, 204, 244, 252, 260
Braun, J.-M. 128, 169, 170, 191, 199, 204, 249
Buchman, A. 9, 29, 75, 241, 252
Burr, R. C. 44, 79, 82, 198, 210, 252, 264

C

Cancio, L. V. 86, 144, 149, 181, 209, 210, 217, 224, 275
Chaffey, C. E. 4, 37, 46, 85, 127, 197, 215, 216, 217
Chapman, E. W. 3, 34, 83, 216, 240, 253, 265
Chapoy, L. L. 79, 224, 241, 250, 255, 265
Chen, I. 1, 86, 110, 163, 197, 209, 224, 252, 275
Chen, I-J. 4, 65, 89, 204, 224, 235, 237, 252
Chen, S-A. 49, 51, 124, 127, 162, 180, 199, 265
Chen, W. F. 3, 49, 109, 127, 146, 191, 199, 241, 252, 253
Chitrangad, B. 40, 44, 143, 184, 199, 224, 275
Chow, T. S. 5, 83, 241, 255
Chung, C. I. 53, 92, 127, 130, 176, 181, 191, 197, 199, 209, 210, 232, 252, 255, 261
Cohen, R. E. 19, 20, 28, 62, 175, 185, 244, 252
Conant, F. S. 135, 227
Cook, C. F., Jr. 58, 69, 114, 120, 191
Coquin, G. A. 28, 30, 31, 120, 144, 147, 163, 222
Coupe, A. 24, 106, 113, 116, 199, 241, 251
Covitch, M. J. 20, 32, 62, 252

D

Davis, W. M. 62, 91, 112, 176, 191
Dearing, R. K. 48, 53, 140, 163, 200, 238, 241, 252, 253
Desai, N. V. 28, 44, 69, 120, 144, 163, 193, 210, 222, 251
Devia-Manjarres, N. 24, 106, 113, 116, 199, 241, 251
Dickie, R. A. 37, 83, 126, 133, 134, 167, 213, 270
Doane, W. M. 44, 79, 82, 198, 210, 252, 264
Douy, A. 20, 28, 195, 225, 244
Dreher, W. H. 9, 47, 50, 128, 241, 253, 265
Druschke, F. 28, 81, 112, 142, 150, 171

F

Fanta, G. F. 44, 79, 82, 198, 210, 252, 264
Farber, J. 4, 84, 118, 199, 234, 235, 269
Farlee, R. 128, 144, 151, 203
Farris, R. J. 15, 72, 74, 121, 219, 241, 252, 255, 261, 266
Faulkner, D. L. 37, 82, 86, 96, 127, 197, 217, 224, 241, 253, 275
Feairheller, S. H. 34, 49, 99, 113, 117, 253, 272
Feder, R. 120, 133, 161, 282
Fellers, J. F. 20, 28, 83, 145, 244
Fenner, R. T. 86, 102, 110, 121, 126, 252, 265
Fesko, D. G. 37, 80, 85, 97, 180, 215, 236, 240
Findley, W. N. 48, 49, 75, 209, 241, 265
Foden, E. 80, 144, 181, 199, 241
Frayer, P. D. 9, 47, 50, 128, 241, 253, 265
Frisch, H. L. 5, 28, 57, 132, 145, 156, 189, 230, 252, 255
Futamura, S. 20, 130, 143, 199, 217, 218, 224, 229, 244, 252, 273

G

Gaines, G. L., Jr. 5, 28, 145, 189, 252, 255
Gallot, B. 20, 28, 195, 225, 244
Galskoy, A. 1, 86, 110, 163, 197, 209, 224, 252, 275
Gent, A. N. 6, 155, 241
Gipstein, E. 120, 144, 161, 191, 206, 222, 229, 239
Godehn, D. 15, 59, 73, 125, 148, 228
Goring, D. A. I. 5, 21, 45, 111, 153, 181, 225
Gough, R. G. 4, 65, 89, 204, 224, 235, 237, 252
Gouinlock, E. V. 20, 62, 247, 252, 273, 274, 275
Gray, D. N. 15, 16, 55, 64, 114, 132, 156, 163, 192, 248, 251, 252, 253
Griep, C. 5, 28, 44, 54, 76, 120, 161, 206, 222
Guillet, J. E. 128, 169, 170, 191, 199, 204, 249

H

Hadziioannou, G. 20, 53, 150, 241
Hagouel, P. I. 11, 76, 120
Halldin, G. W. 35, 50, 55, 145, 154, 181, 207, 208, 240
Hamed, G. R. 6, 155, 241
Hansen, D. R. 20, 62, 141, 241, 252, 274
Harada, K 161, 163, 175, 222, 251
Harita, Y. 161, 163, 175, 222, 251
Harris, E. H. 34, 49, 99, 113, 117, 253, 272
Hasegawa, K. 54, 69, 83, 120, 190, 222, 259
Hashimoto, T. 20, 28, 145, 185, 199, 224, 244, 252
Hayashi, T. 13, 20, 126, 145, 195, 251, 252
Heidenreich, R. D. 53, 147, 161, 250
Helbert, J. N. 58, 69, 114, 120, 191
Helfand, E. 20, 244, 255, 261
Hennessey, W. J. 53, 92, 127, 130, 176, 181, 191, 197, 199, 209, 210, 232, 252, 255, 261
Hertzberg, R. W. 4, 47, 80, 89, 144, 165, 166, 191, 241
Hiltner, A. 13, 20, 126, 145, 195, 251, 252
Himics, R. J. 28, 44, 69, 83, 120, 130, 144, 161, 163, 193, 210, 222, 223, 251
Hoa, V. S. 10, 47, 48, 163, 199, 241, 265
Hoare, L. 17, 53, 89, 110, 127, 150, 199, 210, 241
Hoffman, D. W. 37, 83, 126, 133, 134, 167, 213, 270
Holmström, A. 4, 14, 19, 22, 28, 54, 72, 79, 83, 100, 110, 127, 143, 181, 204, 212, 224, 235, 243, 252, 263, 275, 277
Honma, M. 54, 69, 83, 120, 190, 222, 259
Horlbeck, G. 134, 173, 174, 187, 251
Horne, S. C. 20, 28, 83, 145, 244
Hsu, A. C. T. 37, 54, 97, 240, 278
Hull, D. 17, 53, 89, 110, 127, 150, 199, 210, 241
Hung, P. L. K. 75, 103, 104, 128, 180, 222, 244

I

Ichikawa, M. 161, 163, 175, 222, 251
Ingen Housz, J. F. 54, 78, 79, 210, 252, 258, 264, 265
Ishai, O. 37, 75, 97, 127, 150, 225, 244, 253

J

Jabarin, S. A. 17, 150, 163, 204, 244, 252, 260
Jacques, C. H. M. 27, 47, 94, 167, 176, 191, 241, 265
Jemian, W. A. 37, 54, 97, 240, 278
Jewett, R. E. 10, 76, 120
Johnson, D. E. 120, 144, 161, 191, 206, 222, 229, 239

K

Kacir, L. 37, 75, 97, 127, 150, 225, 244, 253
Kaelble, D. H. 5, 16, 37, 54, 61, 90, 120, 255
Kah, A. 5, 33, 51, 55, 114, 160, 214
Kamal, M. R. 17, 55, 101, 110, 163, 181, 199, 253, 264
Kamel, I. L. 35, 50, 55, 145, 154, 181, 207, 208, 240
Kammlott, G. W. 53, 147, 161, 250
Kaplan, M. 28, 44, 69, 120, 144, 163, 193, 210, 222, 251
Katz, D. 9, 29, 75, 241, 252
Kawai, H. 20, 28, 145, 185, 199, 224, 244, 252
Keinath, S. E. 20, 28, 175, 178, 199, 229, 252, 261
Keller, A. 17, 20, 27, 53, 175, 199, 241, 244, 247, 255, 284
Kim, S. L. 4, 47, 80, 89, 144, 165, 166, 191, 241
Kohashi, T. 49, 52, 128, 159, 161, 255
Kost, J. 4, 19, 63, 106, 127, 181, 199, 212, 253, 277
Kraus, G. 19, 20, 28, 137, 144, 247, 252
Kumler, P. L. 20, 28, 175, 178, 199, 229, 252, 261
Kunin, R. 7, 8, 63, 123, 163, 168, 277
Kurata, M. 20, 28, 57, 83, 145, 156, 229, 230, 246

L

Lai, J. H. 5, 28, 44, 54, 76, 120, 161, 206, 222
Lee, Y.-D. 20, 28, 83, 145, 244
Leeper, H. 156, 188, 210, 220, 257
LeGrand, A. D. 20, 83, 136, 141, 145, 178, 191, 283
LeGrand, D. G. 20, 83, 136, 141, 145, 178, 191, 283
Lightsey, G. R. 37, 79, 82, 106, 110, 163, 181, 192, 199, 253, 281
Liu, C. A. 5, 83, 241, 255
Liu, Y.-N. 3, 49, 109, 127, 146, 191, 199, 241, 252, 253
Livigni, R. A. 19, 20, 37, 53, 98, 106, 145, 163, 241, 244, 246

M

Macosko, C. W. 62, 91, 112, 176, 191
Malguarnera, S. C. 28, 56, 86, 87, 108, 110, 121, 202
Manley, R. St. J. 5, 25, 43, 50, 145, 197, 224, 252, 253, 265
Manson, J. A. 3, 4, 24, 47, 49, 60, 80, 89, 106, 109, 113, 116, 127, 144, 146, 163, 165, 166, 191, 199, 241, 251, 252, 253
Marom, G. 37, 57, 75, 97, 105, 215, 250, 262
Mathis, A. 20, 53, 150, 241
Matsuda, S. 54, 69, 83, 120, 190, 222, 259
Matsumoto, T. 81, 86, 199, 218, 224, 241, 244, 265, 275
McCammond, D. 10, 47, 48, 163, 199, 241, 265
McFarren, G. A. 46, 82, 85, 106, 163, 197, 199, 216, 226, 253
McGinniss, V. D. 5, 33, 51, 55, 114, 160, 214
McGrath, J. E. 18, 19, 20, 28, 50, 62, 83, 139, 176, 200, 204, 224, 251, 252, 254
Meinecke, E. A. 20, 130, 143, 199, 217, 218, 224, 229, 244, 252, 273
Menges, G. 86, 144, 149, 181, 209, 210, 217, 224, 275
Meyer, G. C. 6, 20, 95, 185, 199, 224, 253
Miano, R. R. 59, 132, 228
Middleman, S. 40, 44, 143, 184, 199, 224, 275
Mikami, Y. 81, 86, 199, 218, 224, 241, 244, 265, 275
Miles, M. J. 47, 60, 150, 176, 194, 241, 264
Mills, N. J. 47, 60, 150, 176, 194, 241, 264
Mittal, K. L. 5, 57, 68, 133, 240, 253, 279
Miyoshi, K. 20, 28, 145, 185, 199, 224, 244, 252
Modlen, G. F. 12, 28, 81, 86, 275
Morrow, D. R. 80, 144, 181, 199, 241
Mukherjee, D. P. 86, 143, 185, 210, 217, 219, 224, 275
Murty, K. N. 12, 28, 81, 86, 275

N

Nagamatsu, G. 54, 69, 83, 120, 190, 222, 259
Narkis, M. 4, 19, 37, 63, 75, 97, 106, 127, 150, 181, 199, 212, 225, 244, 253, 277
Need, O. U., III 120, 144, 161, 191, 206, 222, 229, 239
Nelson, J. B. 15, 37, 39, 127, 138, 164, 252, 259
Nemoto, N. 20, 28, 57, 83, 145, 156, 229, 230, 246
Nervo, J. 20, 70, 71, 157
Neureuther, A. R. 11, 76, 120
Neuse, E. W. 134, 173, 174, 187, 251
Nielsen, L. E. 2, 17, 44, 130, 144, 179, 181, 240, 241, 242, 244, 245, 252, 253, 267, 271, 275
Nonogaki, S. 49, 52, 128, 159, 161, 255

Nunn, R. E. 86, 102, 110, 121, 126, 252, 265

O

Oba, Y. 49, 52, 128, 159, 161, 255
Odani, H. 20, 28, 57, 83, 145, 156, 229, 230, 246
Odell, J. A. 17, 20, 47, 53, 175, 199, 241, 244, 247, 255, 284
Oikawa, M. 49, 52, 128, 159, 161, 255
Oikawa, S. 49, 54, 69, 114, 161, 181, 184, 222, 255, 282
O'Malley, J. J. 19, 20, 31, 83, 145, 249, 252, 279
Onogi, S. 81, 86, 199, 218, 224, 241, 244, 265, 275
Osmers, H. R. 40, 44, 143, 184, 199, 224, 275
Ouano, A. C. 120, 144, 161, 191, 206, 222, 229, 239

P

Paik Sung, C. S. 158, 163, 180, 202, 252, 267
Parnaby, J. 56, 78, 86, 130, 181, 224, 255, 276
Pedersen, S. 79, 224, 241, 250, 255, 265
Penwell, R. C. 5, 83, 241, 255
Peterlin, A. 50, 53, 60, 65, 145, 148, 182, 244
Pico, E. R. 20, 83, 119, 145, 218, 247, 252, 261, 265, 275
Poindexter, E. H. 58, 69, 114, 120, 191
Poliniak, E. S. 28, 44, 69, 120, 144, 163, 193, 210, 222, 251
Ponter, A. B. 5, 41, 163, 201, 249, 279
Porter, R. S. 20, 62, 247, 252, 273, 274, 275
Pradipasena, P. 40, 211, 224, 241, 275
Price, H. L. 15, 37, 39, 127, 138, 164, 252, 259
Pulido, J. 24, 60, 106, 113, 116, 127, 163, 199, 241, 251, 253

R

Ram, A. 4, 19, 63, 106, 127, 131, 143, 181, 199, 212, 224, 241, 252, 253, 273, 277
Ramos, A. R. 19, 20, 28, 62, 175, 185, 244, 252
Reber, D. H. 1, 86, 110, 163, 197, 209, 224, 252, 275
Reed, R.M. 48, 49, 75, 209, 241, 265
Rha, C. 40, 211, 224, 241, 275
Riess, G. 20, 70, 71, 157
Robeson, L. M. 19, 50, 83, 139, 204, 224, 252, 254
Rodriguez, F. 3, 34, 83, 216, 240, 253, 265
Rogers, C. E. 20, 32, 62, 252
Rogez, D. 20, 70, 71, 157
Ross, D. L. 28, 83, 130, 161, 193, 223, 251
Roy, P. K. 122, 148, 201, 210, 264, 268
Russell, C. R. 44, 79, 82, 198, 210, 252, 264

S

Sanderson, T. F. 46, 82, 85, 106, 163, 197, 199, 216, 226, 253
Sauer, J. A. 26, 53, 89, 144, 176, 181, 191, 194, 199, 200, 201, 209, 224, 241, 253, 284
Schappell, F. G. 46, 82, 85, 106, 163, 197, 199, 216, 226, 253
Schmidt, L. R. 37, 82, 86, 96, 110, 127, 145, 197, 209, 217, 224, 241, 253, 275
Schneider, N. S. 158, 163, 180, 202, 252, 267
Schonhorn, H. 5, 28, 145, 189, 252, 255
Schreiber, H. P. 5, 25, 43, 50, 145, 197, 224, 252, 253, 265
Shaw, M. T. 28, 131, 143, 181, 233
Shchori, E. 18, 20, 28, 62, 176, 200, 251, 252
Shen, M. 20, 62, 141, 241, 252, 274
Shepherd, L. T. 5, 28, 44, 54, 76, 120, 161, 206, 222
Shida, M. 84, 144, 149, 181, 209, 210, 217, 224, 275
Short, P. H. 37, 79, 82, 106, 110, 163, 181, 192, 199, 253, 281
Shroff, R. N. 86, 144, 149, 181, 209, 210, 217, 224, 275
Sicsler, H. W. 28, 81, 112, 142, 150, 171
Sinha, V. K. K. 37, 79, 82, 106, 110, 163, 181, 192, 199, 253, 281
Skibo, M. 4, 47, 80, 89, 144, 165, 166, 191, 241
Skoulios, A. 20, 53, 150, 241
Smith, T. L. 20, 53, 66, 77, 89, 202, 240, 241, 252, 253, 256, 265
Solc, K. 20, 150, 255
Somekh, S. 28, 30, 31, 120, 144, 147, 163, 222
Soong, D. 20, 62, 141, 241, 252, 274
Sörvik, E. M. 4, 14, 19, 22, 28, 54, 72, 79, 83, 100, 110, 127, 143, 181, 204, 212, 224, 235, 243, 252, 263, 275, 277
Sperling, L. H. 24, 60, 106, 113, 116, 127, 163, 199, 241, 251, 253
Spilgies, G. 28, 81, 112, 142, 150, 171
Spiller, E. 120, 133, 161, 282
Stacy, C. J. 19, 20, 28, 137, 144, 247, 252
Stade, K. 38, 81, 97, 180, 210, 215, 221, 252
Stauffer, W. J. 19, 20, 31, 83, 145, 249, 252, 279
Steinberg, M. 42, 64, 114, 181, 186, 200, 210, 251
Stevenson, J. F. 1, 86, 110, 163, 197, 209, 224, 252, 275
Stradal, M. 5, 21, 45, 111, 153, 181, 225
Struik, L. C. E. 9, 48, 53, 98, 126, 224, 241, 252
Suh, N. P. 28, 56, 86, 87, 108, 110, 121, 202
Suzuki, A. 49, 54, 69, 114, 161, 181, 184, 222, 255, 282
Swanson, F. 4, 6, 47, 202, 210

T

Taira, K. 20, 28, 57, 83, 145, 156, 229, 230, 246
Tak, A. G. M. 53, 89, 106, 107, 191, 241
Takano, M. 2, 17, 44, 179, 181, 240, 241, 242, 244, 245, 253, 271
Taylor, G. N. 28, 30, 31, 120, 144, 147, 163, 222
Tengler, H 28, 81, 112, 142, 150
Testa, L. 4, 84, 118, 199, 234, 235, 269
Thienel, P. 86, 144, 149, 181, 209, 210, 217, 224, 275
Thompson, L. F. 114, 115, 193, 200, 244, 252
Throne, J. L. 1, 19, 36, 85, 88, 110, 163, 181, 197, 199, 231, 253
Todo, A. 20, 28, 145, 185, 199, 224, 244, 252
Tomita, Y. 49, 52, 128, 159, 161, 255
Tong, P. P. 9, 47, 50, 128, 241, 253, 265
Topalian, J. 120, 133, 161, 282
Tsai, P-K. 49, 51, 124, 127, 162, 180, 199, 265
Tsuchiya, S. 54, 69, 83, 120, 190, 222, 259
Tsuda, M. 49, 54, 69, 114, 161, 181, 184, 222, 255, 282
Tsunoda, T. 161, 163, 175, 222, 251
Tusim, M. H. 53, 92, 127, 130, 176, 181, 191, 197, 199, 209, 210, 232, 252, 255, 261

U

Uhland, E. 86, 130, 181, 209, 224, 252, 255, 265, 275
Ulmer, R. 5, 28, 44, 54, 76, 120, 161, 206, 222
Uno, H. 20, 28, 145, 185, 199, 224, 244, 252
Uralie, F. 13, 20, 126, 145, 195, 251, 252

V

Vanderhoff, J. W. 3, 49, 109, 127, 146, 191, 199, 241, 252, 253
Van Duzer, T. 11, 76, 120
Van Nice, H. L. 128, 144, 151, 203
Vitale, G. G. 20, 83, 136, 141, 145, 178, 191, 283

W

Wagner, B. E. 58, 69, 114, 120, 191
Wang, K. K. 1, 86, 110, 163, 197, 209, 224, 252, 275
Ward, T. C. 18, 20, 28, 62, 176, 200, 251, 252
Wasserman, Z. 20, 244, 255, 261
Widmaier, J. M. 6, 20, 95, 185, 199, 224, 253
Wilcox, R. C. 37, 54, 97, 240, 278
Wilkes, G. L. 20, 50, 158, 180, 202, 247, 252, 265
Williams, J. G. 56, 89, 90, 107, 176, 191, 199, 252, 273
Williams, M. C. 20, 83, 119, 145, 218, 247, 252, 261, 265, 275
Wnuk, A. J. 18, 20, 28, 62, 176, 200, 251, 252
Worth, R. A. 56, 78, 86, 130, 181, 224, 255, 276
Wyzgoski, M. G. 27, 47, 94, 167, 176, 191, 241, 265

Y

Yee, A. F. 19, 36, 127, 177, 199, 241, 253
Yenwo, G. M. 24, 60, 106, 113, 116, 127, 163, 199, 241, 251, 253

Z

Zdrahala, R. J. 20, 28, 83, 145, 244